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THE  
**IRISH BUILDER.**

Architectural, Archaeological, Engineering, Sanitary,  
Arts, and Handicrafts.

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“The empire of man over material things, has for its only foundation the Sciences and Arts.”—LORD BACON.

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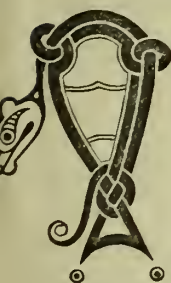
## Illustration.

NEW TRANSEPT, CHURCH OF ST. TERESA,  
CLARENDON-STREET.

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## A VIEW AND REVIEW.



URING the year just closed a steady though somewhat slow advancement in various fields of thought and action has been observable in this country. Measured by amount, the work is not large; but in some particulars there is reason for congratulation that reforms and improvements, long neglected, are at last being carried out, and others urgently demanded are in a fair way of being prosecuted to completion. Throughout the year we have kept our readers posted up in all that was worth knowing in connection with architectural, social, and sanitary progress in this country, and even in regard to the sister kingdoms. The commencement or the completion of every public work of importance in our midst has been duly chronicled in our pages; nor have we omitted to afford particulars of the state of those works which are in hands for a considerable time, some of which are approaching their final stage, and others which are likely to remain unfinished for some years to come. Those under Government control have been duly noticed in our reviews of the reports of the Public Works Commissioners and in other ways, and it afforded us satisfaction to speak of the operations under the Board, and the material progress evidenced to the benefit of the country by its action. Agricultural dwellings have been improved, land reclaimed and drained, and increased facilities given for obtaining loans for carrying out various improvements in the interest of land-owners and tenant farmers. We would like to see the latter class participating to a

greater extent in the advantages obtainable, and every obstacle removed from their path. Good agricultural holdings, good farm-houses, improved land with moderate rents and honest leases, mean a contented peasantry and national prosperity. Without these there must be privation and hardship, ill-will, and perhaps crime, and, most certain of all, continual emigration, which is the worst form of drainage our country can suffer.

The Corporation of Dublin during the late year have not been so remiss in their duties as previously; still there were many matters which should have received more prompt attention at their hands. Although their sanitary officers have very properly prosecuted adulterators in many instances, and made several sanitary visitations in the different parts of the city, and took action in respect to some uninhabitable and tumble-down dwellings, yet a very large number of public obstructions still exist, north and south of the city. The state of the great majority of our streets is still deplorable, and the scavenging of them is almost neglected, except in the instance of the leading thoroughfares. There is, however, a more general desire observable on the part of our municipal body, or at least on the part of several members thereof, to hold themselves amenable to public opinion in matters appertaining to the public health and the performance of civic duties in general.

The Main Drainage question still remains in abeyance; and the Liffey purification, as a matter of course, remains in the same state as it did a year, or, we might write, years ago. The construction of the new streets long projected are not yet commenced, although only trifling obstacles are in the way. The continuation of York-street to St. Patrick's Cathedral, the Cork-hill or Castle-street improvement, and opening of a new street and wide thoroughfare north of the Liffey, extending in the direction of Church-street, or from Chancery-lane across Pill-lane and Mary's-lane towards Constitution-hill, are improvements urgently called for, and ought not to be much longer delayed. The facilities now afforded by the Artisans' Dwellings Act should at once be availed of by the Corporation in removing uninhabitable and dangerous dwellings, the hot-beds in too many cases of disease and crime. What is wanted is not spurs now and again, but steady and earnest action—work undertaken and proceeded with regularly. It is one of the common and constant faults of our municipal body, when pushed into the corner by the voice of the public, to make a showy move, of which talking is the principal part, and real work the least.

The Port and Docks Board are steadily pursuing the work of improvement and en-

largement of the port and harbour of Dublin, and we had occasion during the past year to note the solid progress made in the work, under the direction of their able engineer, Mr. Stoney. None but those who have been absent from Dublin for some years can realise the great improvement that has taken place in connection with the port of Dublin. Carlisle Bridge is in a fair way of being remodelled and enlarged at last, under the joint action of the Port and Docks Board and the Corporation, and the projected new bridge further down the river—the necessity of which we have for years advocated—is determined upon, and will follow, we hope, without any unnecessary delay.

Much public interest was shown throughout the year on the head of the Government Amalgamation Scheme, whereby it was proposed to absorb two of our oldest national institutions, out of which a new royal body of some kind was to be formed, with an Art and Science Museum in connection, under the control of the South Kensington bureau. Help for art and science was tendered, on the condition that the Royal Irish Academy and the Royal Dublin Society should forget their past histories, and cease to be what they were ever considered—nationally representative institutions. The Royal Dublin Society was a consenting party to the project, but, as we anticipated, the Royal Irish Academy would not adopt Lord Sandon's scheme, though, in the interest of art and science, it was ready to make large sacrifices, under certain well-defined conditions. We honestly opposed the Government scheme on more grounds than one, and we most strongly urged its rejection. The opinions we expressed months ago we still hold, and we consider that it would be a most undesirable and disastrous step for the Royal Irish Academy to adopt the amalgamating and annihilating scheme; for amalgamation meant nothing more than certain annihilation to the Royal Irish Academy. The Royal Dublin Society of late years stands on a somewhat different footing from the former body, but even in its case we would rather see it maintaining its old and distinctive character than disappearing in mist.

Changes were, no doubt, desirable in the constitution and management of the Royal Dublin Society, but the changes needed could be beneficially carried out without the adoption of the Sandon proposal. The Royal Dublin Society, through some of its demonstrative members, seems to have committed itself so far that it only wants a favourable opportunity to surrender wholly to Government or South Kensington control; but it is otherwise with the Royal Irish Academy, which has preserved its indepen-



dence, and, despite threatened reverso, maintains a firm footing. The Royal Irish Academy and other cognate institutions in this country have every right to Government assistance in aid of science and art. Money is voted ungrudgingly to learned societies in London and Edinburgh and other places in the sister kingdoms, but it is only doled out in small sums for this country. Indeed, it is thought by some official busy-bodies that money should no longer be voted to Irish representative institutions, such as the Royal Irish Academy, &c., unless they consent to be governed and lectured through London departments.

Give us a Science and Art Museum by all means, give us better facilities for art instruction, but do not ask us to surrender our right of managing our own business. As we have already, on several occasions in the course of the past year, spoken our mind in relation to the Government scheme, we will not dilate upon the matter now.

Apart from the proposed scheme, it is just to say that the Royal Irish Academy and the Royal Dublin Society, throughout the year, held their meetings and transacted their business as usual. Many valuable papers were read at the meetings of the former, which will be found hereafter in the published "Transactions," and usual lectures, and exhibitions, &c., were held in connection with the latter.

Of other native institutions of note it is not necessary to write at any great length. The Royal Hibernian Academy held its usual annual exhibition of painting, sculpture, and architecture, but the organization of the institution remains the same. On more than one occasion we expressed our opinion on the necessity of making the Royal Hibernian Academy more useful in the interest of painters, sculptors, and architects. Yearly exhibitions are serviceable in their way, but this academy ought to have been long since, and so continued, a thoroughly efficient art-school and not a mere picture-gallery. Its founder, an eminent architect, hoped for different results than what are forthcoming in these years in the fields of painting, sculpture, and architecture. It has architects, to be sure, among its members, but we need more honourable workmanship and less honorary membership. Titles are good in their way, but they ought, by right, be incentive to more labour, when obtained, and not productive of indifference.

The Royal Historical and Archæological Association of Ireland is still active, and throughout the year has held its usual meetings, the proceedings of many being most interesting and valuable, as our readers may have observed. Few bodies that we know of have performed more useful labour in the cause of archæology, on small means, than this society. Although it has no organised yearly excursion, like kindred bodies in England, yet it has in its ranks several very active members, who are most industrious in hunting up and unearthing valuable "finds" above the soil and below it.

We have still in our midst in this city an Institute of Architects and an Architectural Association. The former, for reasons already made known, has not a very healthy existence, but the latter has, in part, supplied the wants that the former had wont to render. It is a matter for regret that both the meetings of the Institute and the Association are but very poorly attended; so

much so, in the case of the former, that the ordinary monthly meetings are no longer held, though the council or a portion of it still meet. Inaugural meetings are, as a matter of course, generally well attended, and in respect to the Association they have no reason to complain on that head, but it has been otherwise with the general meetings of the session. It is also a sad matter for reflection in the face of all the activity shown by the Architectural Association of London and other provincial bodies in the sister kingdom, that the Irish Association has failed to secure even a moderate attendance at its classes of design and construction. These meetings are now removed for the present from the programme of the session. It would not be difficult to point out the causes of this indifference and neglect on the part of young architects, sufficient to say the disinclination for study and work evidenced is not a healthy sign, and does not bespeak well for the future.

Of the Belfast Architectural Association, which at one time promised well, we understand that its past session was its final one, though not announced, and that we are correct in writing over the body itself a "*requiescat*;" but possibly there may be a "*resurgam*" at a future day in a new form.

Our Irish Institution of Civil Engineers, though modest in dimensions compared with that of its brethren in London, has performed some useful labour through a few of its able and active members. We hope to see it before long extending in numbers, and exerting a larger influence. We have recently printed some excellent papers delivered at its meetings.

The Royal Geological Society is entitled to notice here from the character of its proceedings and the studies of its members. We would like to see architects, builders, and building workmen giving a little more attention to the study of practical geology, as it would enable them to be better judges of the various modern building materials now utilised, and to select clays, sands, and stones, with a view to their lasting qualities and suitable application according to circumstances and locality.

The Dublin Sanitary Association, although a voluntary body, deserves praise for its efforts in the interest of the public health, and there can be no doubt that owing to its reports our Corporation were made more keenly alive to the necessity of doing sanitary work that would otherwise have been neglected. We have ourselves never let an opportunity pass of directing public attention to the unsanitary condition of the city for years past, and since the Sanitary Association began its voluntary labour. Incessant remonstrances, and the constant publicity of acts of shameful neglect, at last had a good effect, and the good result was further strengthened by the recent commission on the part of the *Sanitary Record*. Our Corporation can no longer hesitate to move and act to the utmost of their power in removing foul blots and foul spots, and putting the city in such a sanitary condition as will command respect, for it is a life-and-death question, and one which it would be criminal to neglect any longer.

Our various schools of art now in connection with the South Kensington Department have made steady progress. The art schools of the Royal Dublin Society, the Cork School of Art, and the Belfast and Derry Schools

are all in a healthy state. The Dublin school has shown its progress of late in a most marked manner by the number of prizes obtained by its pupils, which speaks well for the efficient management of this school. We would again counsel our artisans to avail themselves of the facilities afforded by the schools of art in obtaining a knowledge of drawing, so indispensable to workmen of most trades. Building craftsmen in particular need a good knowledge of design, and without it, no matter how experienced they may be otherwise, they are not technically educated.

Speaking of art, we may note that during the late year among the statues inaugurated were, the Grattan, the Lord Rosse, and the Guinness statues, and that others are commenced. Throughout the country there is a greater desire to erect memorials to our celebrated or eminently useful men, and the art-teaching in our schools will be an auxiliary to this end, and to the creation of a class of artists and lovers of art and a general public with more art sympathies.

Our country was not much disturbed in the labour market during the late year by "strikes." The instances were very few, and, except in one case in the north, these disputes were of very short duration, and were soon amicably settled.

We lost a few remarkable men during the year connected with the fields of literature, science, and art, and their loss has been deeply and widely felt. Among the number were—our old co-labourer Richard Rolt Brash, architect and archæologist; Sir Win. Wilde, widely known for his literary attainments in various fields, but particularly in native ones; S. F. Lynn, who commenced the study of architecture, but exchanged it for sculpture, and was making rapid strides when he was stricken down; and Terence Farrell, who also laboured in the ranks of sculpture. We also lost during the year some of our old, respected, and long-established builders, some of whom, from the nature of their contracts and connections, were well entitled to more than a passing notice.

Of proposed and incomplete and impending projects and works, we might dilate at a great length, but we consider it is unnecessary to occupy much space in alluding to them. Many ecclesiastical edifices in this country are still dragging their slow length along towards completion, being carried on as funds can be raised by voluntary gifts or through aid of appeals and collections. Our ecclesiastical edifices of late years show a great improvement in design, though we are not quite sure that there is any great improvement in the materials of their construction in several instances. Our civil architecture has also much improved in design and internal arrangement; but in some of our recent public buildings there is too much aiming at novelty, some architects seemingly desirous of showing something new and not something better. Sanitary requisites are every year receiving more attention, and even in the case of buildings not erected under the superintendence of architects. Our artisans' dwellings have long called for reform, and the subject, we are glad to find, is commanding notice. As will be seen by our advertising columns, the Dublin Artisans' Dwellings Company seek for tenders for two blocks of buildings, from plans by Mr. T. N. Deane, F.R.I.B.A.



The recent conference of architects in London, which was attended by two or more of our Irish representatives, has, we have no doubt, been fruitful of good, not alone to the profession, but to the public. The papers read bearing on sanitary construction were excellent in their way, and the discussions led to an interchange of ideas that must result in reforms over the three kingdoms.

Some of our Irish architects are fully alive to the wants of this city in a sanitary direction, the most urgent of which is a Building Act, long advocated by us in this journal. Until a proper and well-digested Building Act is passed and put in force in this city for the regulation of buildings, thorough sanitary reform cannot be effected, and "scamping" will continue on the part of unprincipled builders. The Metropolitan Board of Works of London will make another effort next session to increase their powers by bringing in a bill to more clearly define the conditions of good building, and to deal with the malpractices of unprincipled builders. Our Corporation are called upon by every honest motive to bestir themselves in the same direction, and assist the architectural profession in carrying out the needful reforms.

It is the intention of our Institute, as declared in their last report, to obtain representation of "Architecture" in the governing body of the proposed Art Museum, and space for a suitable collection and library in the building. The intention is good, but we would ourselves desire to see the profession itself making more persevering efforts on its own behalf, on its own ground or within its representative bodies. If members will not keep their own Institute and Association in a healthy state, and make some sacrifices for that end, they cannot expect or command much outside support towards a due representation of their interests in external institutions.

The reclamation of waste lands and the preservation of open spaces has throughout the year received increased attention, and for our own part we devoted space and gave every encouragement to discussions upon these subjects, which we have ever considered important ones. The battle for the free opening of our public squares we have for years unyieldingly fought out, and hopes are entertained that the largest and the finest of our public squares will, in a short time, be opened for the healthful recreation of all classes of our citizens.

The literature of architecture, engineering, archaeology, and sanitary science is growing every day and extending far and wide, and our professional journals in the sister kingdom are keeping their readers, professional and general, well informed as to what is taking place in those and cognate branches of art and science. Many books on art subjects are yearly issued from the London press, but Dublin, through her publishers, adds but little in the book form to the number. A few of our professional men are authors of published volumes, but the great majority of these works have been issued from publishing houses in the capital of the sister kingdom. Though we are far behind in this respect, we do not lack able and efficient writers on art, science, or various technical subjects. The papers read at the meetings of our literary, scientific, and professional bodies are, in many instances, excellent, and equal to those read at similar societies in the sister kingdom.

The Irish publishing trade was once a trade of bright promise and of good standing, but for several years past it is but a poor vestige, a mere remnant of what it once had been. Instead of being principals, our publishers are content to act as mere agents to others outside the kingdom; and native authors, understanding the situation, prefer to publish abroad, but are nowise desirous of preventing a sale at home. We hope for better times for the native publishing trade, and more public spirit among our native authors, particularly those who are not depending upon their writings for their daily bread.

A few words more and we have done. Though it does not become a man or a journal to indulge in self-praise for what either may have attempted or accomplished, yet, standing alone as the only representative journal of its kind in this country, we may be allowed to express an opinion, even in regard to our own labours. Well, then, as far as our resources permitted us we have earnestly striven to make this journal an honest and faithful exponent of every class that came within the scope of our advocacy, and to afford fair play to all—professional, capitalist, and workman. It has always been our endeavour to make our pages useful to the general as well as the professional reader, and it may have been observed that, during the past year, our articles were of a varied yet of a practical character. If there was one subject more than another that commanded our attention, and received it ungrudgingly, it was the public health. The sanitary improvement of our country and the dwellings of our people will still, in the future as in the past, receive every attention at our hands. To other earnest workers in the cause, we have nothing but good will—no matter from what direction they may hail. It is our province to criticise, but in criticising we will exercise our right to differ; and, while not attacking any man's character, we shall not hesitate to riddle his cause if it is a bad one and inimical to the common good. Still counting, as a matter of right, on the support of the profession and of the enlarged constituency we represent, we wish all our readers on this day—the commencement of the nineteenth volume of the IRISH BUILDER—"A HAPPY NEW YEAR."

#### WHO DESIGNED THE PRO-CATHEDRAL, MARLBOROUGH-STREET?

THE design of this church having been attributed to the late Sir Richard Morrison by Mr. William Fogerty, in his presidential address at the opening meeting of the Architectural Association of Ireland, published in our last issue, it is necessary for us to correct the mistake he has fallen into. A letter appears from a correspondent in Saturday week's *Architect* giving some particulars of the origin of the design, on the authority of a reverend gentleman who was in a position to know the truth about the matter, and other incidents in connection. Apart from this, however, some knowledge of the origin of the design and the history of the church has long been before the public in more than one publication. A description of the church will be found in Wright's "Dublin," published as far back as 1821, from which we will quote the opening paragraph:—

"This magnificent structure was commenced in 1816, on a plot of ground formerly occupied by the mansion of Lord Annesley. The ground was purchased for £500, and the design was sent over to this country by an amateur artist residing in Paris, who entrusted it to the care of Dr. Murray. The design is not taken from St. Maggiore at Rome, St.

Phillip du Roux at Paris, or any other building in existence; these churches are in the Roman, whereas the Metropolitan Chapel is in the Grecian style."

We do not consider, though some may, that the late Sir Richard Morrison was a greatly "over-rated architect." He was born into the profession, his father and grandfather having been connected with it. Sir Richard came to Dublin at an early period of his life, and became the pupil of the celebrated James Gandon, to whom the city owes much for its architectural embellishment. The family resided for several generations at Middleton, in the County Cork. Sir Richard Morrison, though an architect of respectable and undoubted ability, was excelled by his gifted son William Vitruvius Morrison, who designed numerous buildings and mansions in the castellated style, Tudor or Elizabethan, throughout this country. Some were executed in partnership with his father, but the great majority were executed when he practised independently. Many of the works of William Vitruvius Morrison are still attributed to his father. Like Pugin, the younger Morrison designed the furniture of his Tudor buildings. Had he lived he would have stood at the head of his profession; but, alas! delicate health and bodily suffering, with constant study, hastened his death at the early age of 44. He died in 1838 at his father's residence at Bray. Sir Richard survived his gifted son several years, and died as late as 1849 at a good ripe old age.

#### THE WHITWORTH DRINKING FOUNTAIN, DROGHEDA.

THE formal opening of the "Whitworth Memorial Drinking Fountain" took place on Thursday last. At one o'clock a number of the friends and admirers of Mr. Benjamin Whitworth, M.P., a gentleman who has largely benefited the town and trade of Drogheda, assembled at the Tholsel, in the immediate vicinity of which the fountain stands. A brief address was read, and the fountain handed over to the Corporate body.

The base is square on plan and highly ornamented with angle shafts of Aberdeen polished granite, with carved caps and bases of Portland stone. It rises from a handsome platform surmounted by steps. The water issues forth from finely carved lions' heads, and is received into bowls of Aberdeen polished granite supported on carved caps and columns from moulded base. A richly moulded and highly carved cornice surmounts the pedestal, which is broken up on top with gablets containing the monogram "B. W.," carved in high relief. Each of the four faces in second stage is formed into a very deeply-recessed panel with richly moulded and traceried arch-head over same, supported by Aberdeen polished granite shafts and carved Portland stone caps and bases, with intermediate bands. On the angles are buttresses of an ornamental character, richly moulded; and over each panelled recess is a high-pitched, richly-moulded and crocketed gable, ornamented with ball flowers and finials. The intersections show foliage, from which springs a handsome and highly decorated spirelet with carved crockets on each quoin for 3 ft. at top. The whole is surmounted by a painted and gilt finial, and reaches about 38 ft. in height from the ground. In the south panel the Whitworth crest is effectively carved in Portland stone, and a white marble shield under same bears the following inscription:—"This fountain was raised by public subscription, in recognition of the many valuable services conferred upon the town and trade of Drogheda by that true philanthropist and generous benefactor, Benjamin Whitworth, M.P. 1876." The other side bears the inscription:—"William Whitworth, M.P., Mayor, 1876."

We should not omit to mention that the fountain was designed by Mr. P. J. Dodd, C.E., Drogheda, under whose superintendence the work was carried out by Messrs. Pettigrew and Son, Navan, at a cost of about £450.



## POSTAL IRREGULARITIES.

WE are positively sick and tired of complaining to the Post-office authorities for what seems to us to be a system of gross and chronic neglect. Week after week, month after month, and year after year, matters have been proceeding from bad to worse in the despatch and delivery of letters connected with this journal. Letters from our correspondents in London are received often in the evening instead of in the morning when they are due, and in several instances not until the next day. Packets, newspapers, books, and manuscripts, are nearly always delayed for several hours in their delivery. Letters posted on this side and intended for our correspondents in London are often delayed, and shamefully so in the case of packets. Here is one of the latest instances. A packet posted by us here in time for the evening mail on the 26th ult., which should have been delivered in London the next forenoon, was not delivered until the evening of the 29th, while one posted a day later, viz., 27th, in time, was received on the evening of the 28th in London, instead of the morning. So that the last posted packet was the first delivered, though both were long behind their time. Will the Post-office authorities kindly explain the cause of the above delays? Other serious delays to us have occurred since on both sides of the channel. We make our complaints at the G. P. O. in Dublin, and at the end of two months perhaps, we are told that every inquiry has been made, but the cause of the delay cannot be traced. This is all the satisfaction we can get, and we are almost inclined to write that the inquiries are little better than a farce. We can make allowances for short delays at Christmas times, and on other special occasions, owing to pressure of public business, but the annoyance we experience is continuous. It would appear that there are "Paul Pry's" or pilferers either in Dublin or at Holyhead or London, for cheques have occasionally been extracted; but, being checkmated before they could cash them, the pilferers destroyed their "loot." We have to complain of repeated losses in books, papers, and MSS., on our own part and on the part of our correspondents. We are forced at last in self-defence to make this public exposure of the neglect in this Department. It may be taken for granted that we are not alone in suffering. We would like to hear what some of our contemporaries have to say on the subject.

## THE CITY AND RATHMINES WATER SUPPLIES.

A CONTROVERSY has for some time back been carried on in our public journals as to the relative purity of the canal water used by the Rathmines township, and that of the River Vartry from which the city supply is obtained. Since the date of our last issue a little has been written by Dr. Emerson Reynolds, in which he says:—

So many misleading statements have been circulated respecting the samples of canal and Vartry water analysed by me for the Rathmines Commissioners in October, 1875, that it is necessary for me to state the facts bearing upon the matter as briefly as possible. The commissioners requested me to make analyses of the canal and Vartry water supplied to the township. As I happen to live on the south side of Upper Leeson-street, my house is supplied with canal water (with which I am satisfied), and from one of the taps was drawn the sample for analysis on the 16th of October, 1875. This sample was analysed before and after boiling, with the re-

sults stated in my report; but the analysis of the boiled water was made as a matter of interest, and was not used for ultimate comparison with the Vartry. There is, therefore, no ground for the absurd statement that boiled canal water was sent to me; nor do I believe that any chemist of ordinary skill would be deceived by such a sample. The specimen of Vartry water analysed was also taken within the township, and was drawn by my laboratory attendant from a Vartry supply tap in the house of a gentleman living at Rathgar. As the first analysis of this water gave me rather higher numbers for "organic contamination" than I expected, a second analysis was made, but with nearly the same results. The figures given in my report are the mean values obtained. The facts were, therefore, ascertained with the utmost care. Upon the results of these analyses of the two waters actually supplied to the township on a particular day rests the inevitable conclusion stated by me "that the Vartry water, while, undoubtedly, to be preferred on account of its great softness, is not superior in any other material respect to the well filtered supply from the canal." Dr. Studdert may explain the facts as he pleases, but he cannot make me discredit the evidence of my senses, however much he may wish to do so.

Apart from the analyses of Dr. Cameron, Dr. Bell, or Dr. Reynolds, in particular cases observation would lead to the conviction, when all the surroundings of both supplies are duly considered, that the Vartry Water is preferable to the canal, and far less liable to pollution.

## SAFE THEATRES.

THE late fatal catastrophe at the theatre, Brooklyn, has drawn forth suggestions as to how such buildings should be erected. Amongst others the *New York World* has the following:—

What we intend to say is, of course, merely suggestive—such thoughts as must present themselves to every ordinary mind. There is, and there can be, no doubt but man's intelligence and ingenuity can find an escape from these oft-recurring dangers. Perhaps there is nothing truly needful to man but man can achieve. What we are now considering is a question of bricks and iron—of the number and the width and the construction of "vomitories," the expressive name given to the doors in the old amphitheatres, some of which were large enough to seat sixty or eighty thousand spectators. Those doors can be made wide enough and numerous enough and opening both ways, so that they could offer no obstruction to any crowd, however dense it might be, and however panic-stricken.

The building itself—surely it ought to be entirely isolated. Circular in form—at least on the side of the auditorium—the external walls thick and of brick or stone, and presenting one succession of doors made of light iron if necessary—those so large and so frequent as to prevent the possibility of either mistaking them or jamming them up. This for the lower tiers, with the space behind them open to the external wall, or, if partitioned off, that partition to be a close succession of wide doors, opening outward, and giving to the crowd just as little obstruction as if there was no partition in it. Such is our conception of what is necessary to secure the safety of the lower tiers. Indeed, those means of escape are so obvious that they must suggest themselves to every mind.

Turning to the gallery, the interior descending steps now in use, no matter how wide or how fire-proof, can never offer entire safety. Down those steps numbers might trip, and fall on the escaping ground below, repeating the terrible result we have so lately witnessed. To give entire security to the gallery, it would seem that all the arrangements necessary below should be exactly imitated above, with this indispensable fixture added to them.

An outside iron open work terrace, surrounding the whole semicircle, so far round as a door opened on the outer wall, so that the terrace might present the same safety to

those in the gallery that the outside street would present to those emerging from the lower tiers. This terrace, fenced in all round with an iron railing, so high and so strong as to prevent the possibility of falling off. At each end of this semicircular terrace an immense staircase, widening from the top to the bottom; and so making a jam next to impossible. Besides, once out on the terrace, there would be no panic as there would be no risk. Even if the whole interior were in flames they could not penetrate, scarcely warm, the heavy brick walls till every one of the crowd would have time to be at home and quietly seated at the supper table.

But, apart from all this, the interior of the building need not be in a condition to receive fire from the burning scenery and its surroundings. Those—the curtains and their appendages—must remain, somewhat modified perhaps by rods and fixtures of iron instead of wood. In slide scenes and partitions, and other illusive "properties," tin might perhaps do a good deal in superseding wood. The unprofessional hands employed about the theatre are sometimes drilled into a fire brigade, and are present with all necessary apparatus and water at their hands. There does not seem to be much difficulty in putting all the arrangements on a sound and a safe footing; and even the insurance companies, if they adventure such risks, might well afford to see sharply to these necessities.

In this city the Chief Commissioner of Police has ordered a close inspection of our theatres, with a view to the safety of the throngs that at this season frequent them. The Royal has been improved in this respect.

## THE TREES IN SACKVILLE-STREET.

A "PRACTICAL Gardener," writing to a contemporary, recurs to this (as he terms it) "well-worn subject," and announces that he remembers "hearing at the time the Planes were bought, that they were not properly planted—that is, the borders were not well prepared for them, and, moreover, were not ready when the trees arrived. This being the case, success was impossible." He suggests another attempt in same direction, and the purchase of "good, well-rooted, well-shaped Planes," and that a good border should be ready for them, with a competent person to see them properly planted. We were always under the impression that an experienced gardener had been employed to overlook the first planting of the Planes. Perhaps we have been wrong, but if not, the "dead-and-alive" condition of the trees that remain does not say much for his skill. They are objects of neglect and targets for ridicule. The Plane tree is quite suitable for street planting, and, with ordinary care, should have succeeded well in this city. Our "Practical Gardener" is to "live in hope" of seeing, *some day or other*, Planes flourishing in Sackville-street. *The Garden* informs us that the trees planted on the Thames Embankment are in a flourishing condition, and it says: "we have never seen a finer batch of young trees."

We may as well append a few statistics of the former "Plantation." The number of trees planted (furnished with guards by Messrs. Kennan and Sons, Fishamble-street), was 56. Of these 13 have, alas! disappeared within the past year. We suppose the guards and poles have gone into store (?), and will be available when the proper planting season arrives! The façade of the General Post Office was favoured by having four trees planted in its front. Alas! *one only* is left. Oh! shade of Francis Johnston, could you take a glance at the *twig* in an iron cage which stands side by side with one of your grand Corinthian columns!!



## HOUSE DRAINAGE.

ON Wednesday, Nov. 29, a paper on the above subject was read at the Society of Arts, London, by Major-General F. C. Cotton, C.S.I. From a report of the discussion which followed the reading of the paper, and which appears in the *Journal* of the Society, we take the following:—

Mr. Baldwin Latham said the engineer might bestow the greatest pains, probably, in carrying out the most perfect system of town sewerage, and yet, if the work connected with the drainage of private houses was not undertaken with some skill and attention, the whole system must prove a failure. The strength of a chain was tested by its weakest link; and the weak link in a system of sewerage was the private house-drain. If persons only knew the absolute importance of paying personal attention to this they would not, he was sure, sit easy by their fire-sides, thinking of those malarious gases which might be escaping from the basements, and permeating their habitations to the permanent injury of themselves and their children. It was almost impossible to mention all the matters necessary with regard to this question, but there was one thing which only recently came under his attention in connection with one of the largest houses at Queen's-gate, where there were seven house-maids' closets one over the other. There was a 2½-in. lead pipe communicating with the whole of them, and ventilated at the top. He had found that a pail of water thrown down at the top untrapped everyone of the traps below. This showed the absolute necessity of not laying down any general rule with regard to a simple ventilating pipe. The effect of the pail of water was to induce a current of air—in fact, it acted like the piston of a pump, and drew out the air from the pipe, and so sucked out the water from the adjoining trap. The only way of getting security in this case was by putting in a second pipe alongside the other, and carrying it independently to a point above the highest sink. This defect was cured in the same manner. There could be no doubt that one of the greatest evils with regard to the laying of drain-pipes was the use of clay at the joints. Apart from the qualities of the material itself, it must be recollected that if you took two ordinary spigot and socket pipes, and filled the joint with a fillet of clay, and put the spigot into the end of it, they did not fit tightly, because there was room for the clay, and considerable play, and the moment the filling was put in at the top, the weight of it forced out the clay at the bottom, and left an aperture above through which the sewage flowed into the subsoil, and thus the basement of the house soon became filled with sewer gas. Some of the best houses in the West-end were the worst drained. In many cottages the sanitary authorities looked after them, but the large houses nobody except those living in them was interested in looking after. He had seen a house where a royal prince lived, and in which two cabinet ministers had previously died, where he found a cesspool at the foot of the staircase, and a brick sewer, running from one end of the house to the other, which had not even an apology for mortar in its joints, and there was only about 18 in. between it and the flagged basement. If such was the state of matters in a royal residence, what might be expected in other houses? With regard to covering the basement with concrete, he should like to draw attention to the lectures recently delivered at Munich by Professor Pettenkofer, in which he showed the enormous influence of aeration from the ground air, and stated that London would not be at all the healthy place it was if it were not for the fact that there were so many open basements between sewers and gas-pipes and the houses. This insensible ventilation went on with regard to every building, and he showed that the mud hut of the savage—where people were huddled together in a very crowded state—was com-

paratively healthy, because of this imperceptible ventilation which passed through the walls. The same thing took place with regard to the gipsies' tents. Then, with regard to concrete, it was known to be extremely porous as a building material, and, therefore it would allow of a remarkable degree of this imperceptible ventilation, even from the ground atmosphere, to pass into the house; and it might, therefore, be necessary, hereafter, in the construction of houses, to cover the concrete with asphalt, and provide proper means for admitting the external air; because, if you shut out the air at one point, there is a great stress at that place, unless you made provision to admit air somewhere else. The great point was, not only to prevent the impure air getting in, but also to provide for pure air taking its place. Having himself suffered from imperfect drainage, he was convinced there could not be a point of more importance, and he could thoroughly endorse the saying that, in taking possession of a house, you should look to the drainage before you furnished the drawing-room.

The Chairman (Mr. R. Rawlinson) said that sanitary science is new, though the Levitical laws are old. The Romans sewered their towns and drained their baths, and probably other public buildings, but we have no evidence that the houses in Rome were drained as we understand house-drainage. Water-supply is as old as civilisation, but not in the fullest acceptance of the term, as practised in England. Water was not laid on under pressure to each house, as in London, to the total abolition of water-carriers. The progress of modern sanitary science may be said to have commenced with Drs. Mead, Lind, and Sir John Pringle; the great start of executing sanitary works dates, however, from about 1840. Who invented oval sewers cannot easily be settled; but most certainly no person belonging to the present generation, as there are oval sewers—that is, culverts, beneath some of our oldest canals. Earthenware pipes have been made and used in the East from remote time, principally for pure water conduits, but very old drain-pipes have also been discovered beneath the mounds of Babylonian ruins and at the Coliseum. If land-drains or house-drains had ever been extensively used they would have been found. The Roman power, in its extent, is known better by its buried pottery than by any written records of history, and we, in our land-draining and town-sewering, are writing history in some senses more permanently than the literary historian. Water, an emblem of purity, has been regarded with superstitious reverence in all ages; it is a solvent, a purifier, and a power, it is a prime necessary of life, and the sheet-anchor of civilisation. A land without water is a barren desert. A town without pure water is a place of sickness, misery, and plague. Water in abundance should be brought into a town, and proper means for it to flow out should be provided. Such conduits we term main-sewers and house-drains. The waste water of a town sewage may, for a population of 20,000, be about 600,000 gallons per day; the entire excreta will be 5,000 gallons, or 1 to 220 of sewage. Any sewers which will take the one will take the other. Towns must be sewered, houses must be drained, and the human excreta, which is nearly all fluid, if passed into the drains, will flow away with the sewage; it should, therefore, be the duty of engineers and architects to learn how to plan and construct proper town-sewers and house-drains. To say that architects have not attended to house-drainage need not be considered a very severe censure, because, as previously stated, the science is new, so new that it cannot yet be said to have been established, although definite rules have been laid down, which, however, are termed "suggestions." It would, indeed, have been most wonderful if all men had accepted these suggestions, and acted upon them. The main principles may be recapitulated as being that surface water, as much as possi-

ble, should be discharged over and off the surface. Sewers should be for sewage, and drains should be tributary to sewers for drainage from houses. Neither sewers nor drains should traverse the basements of public buildings nor houses. Sewers and drains should be true in line, in gradient, and in cross-sectional form. Sewers and drains should be fully ventilated; there should be ample means for flushing and for inspection by side entrances, by man-holes, and by lamp-holes. Sewage out-fall works should be provided for interception of solids and silt, as also for clarification or for purification of sewage, so as to prevent the pollution of inland streams and rivers. To indicate that eminent architects have transgressed every suggestion—which, however, are suggestions after the buildings had been executed—I may name a few instances. The new Houses of Parliament, Westminster, where the main sewer, of large dimensions, traverses the basement longitudinally, below the level of the River Thames, and all the tributary drains fall into the sewer. Buckingham Palace was in a similar condition. Marlborough House the same. In both these cases the sewers have been altered and ventilated. Windsor Castle did drain into fifty-three cesspools up to the year 1844, all within the basement. Noblemen's houses in the country were no better. Alnwick Castle, Northumberland, in 1850, was traversed by large old rubble drains, in which rats swarmed. The old drains in the town of Alnwick were of a similar character. The rats in this town were, however, discriminating and fashionable, as, when the ducal family was at the castle the rats were at the castle, and when the family was from home the rats patronised the town. Rats about any town or house are a certain indication of bad sanitary conditions, as in perfect sewers and drains they cannot exist, there being no lodgment for them. At Hawick (Northumberland), the seat of Earl Grey, the sewers were of very large dimensions, and for each sink and water-closet a cesspool had been provided; the house, when inhabited, was pervaded with sewage gases. At Bowood, the seat of Lord Lansdowne, large absorbent sewers and cesspools occupied the basement; there were about forty water-closets, the entire contents from which had been absorbed or evaporated from the day they were first used up to about 1856. Gwydyr House, Whitehall, the offices of the first Board of Health, 1848, was found on examination to have nine cesspools, full and overflowing, within the basement. The new public offices, Whitehall, have had the basement beneath the Home Office flooded with sewage. It cannot be pleasant for noblemen to have their houses pointed to as frightful examples. There is, however, this consolation—namely, all of those I have named have now been effectively drained and ventilated, and may be pointed to as good examples, the old drains have been removed, and Alnwick Castle has been sewered with an outlet earthenware sewer 12 in. in diameter. The Houses of Parliament retain the central sewer. Dr. Percy, however, takes care, by ventilation, that no injury occurs to the members. In Paris, Brussels, Ostend, and some other Continental towns there are cesspools and sewers, which is a costly and dangerous arrangement; the cesspools are compulsory, and are beneath court-yards, or beneath the basements; these overflowing and trickling into the sewers, the escaping gases from them make the houses most offensive and dangerous. There has in past times been neglect in not providing correct plans of town-sewers and house-drains. I have never, in any case to which my attention has been called, found a correct plan of the sewers and drains. I have never, however, undertaken a work of sewerage and drainage that I have not prepared and left a complete plan, with a fully written description and key to the works, so that flushing may be attended to. Full and correct plans should be insisted upon in each case.



## INSTITUTION OF CIVIL ENGINEERS (LONDON).

THE fifty-ninth annual meeting took place on Tuesday the 19th ult., Mr. George Robert Stephenson, President, in the chair. The proceedings commenced by the appointment of scrutineers of the ballot for council, when, the ballot having first been declared open, the report of the council was read. The constitution of the society, which was alluded to in the two previous reports, had again received careful consideration. According to the present classification, no distinct provision was made for the large number of engineers who were past the age when they could remain students, but had not yet occupied such positions, nor been so employed, as to render them eligible for members. This omission it was proposed to supply by the creation of a class of "Associate Members"—the least objectionable title out of many that had been suggested. Simple as the matter might appear, the selection of a suitable expression for the new class had been difficult, as, for weighty reasons, it was deemed undesirable to disturb the existing title of member and that of associate. The proposed class was intended to embrace persons actually engaged in some of the branches of Civil Engineering, while in the future, associates were to be restricted, as they originally were, to those "who are not engineers by profession." The changes in the roll of the institution during the past twelve months had led to an effective addition of 41 members and of 137 associates, bringing up the total number (exclusive of the students) to 2,462, or an increase at the rate of nearly 8 per cent. per annum. Eleven years ago the gross total was 1,203, and in December, 1862, it was exactly 1,000. Into the class of students attached to the institution, 696 candidates had been admitted since it was established nine years ago. Of that number 385 were still on the books, 158 had been elected associates, while the remaining 153 had ceased, from various causes, to be connected with the society. As the scale of contributions to the funds had been unchanged for forty years, notwithstanding that in the interval all the circumstances had been so materially altered, it was open for serious consideration, whether the scale should not now be revised, and whether the time had not also arrived when the area for "Residents" should be made to include the whole of the United Kingdom, instead of being limited, as at present, to those living within ten miles of the General-post Office.

There were twenty-six ordinary meetings during the past session, when nineteen papers were read and discussed. The character of the original communications, and of the remarks to which they gave rise, might be gathered from the printed records in the four volumes of "Minutes of Proceedings" already issued. Nine other papers had also been selected for publication in the second section of the proceedings. To the authors of fifteen out of these twenty-eight essays, Telford Medals and Premiums had been awarded. Of the recipients six were members and six associates of the institution, while three did not belong to the society, and one of these was a foreigner. A comparison of the earliest volumes of the "Minutes of Proceedings," first published in 1837, with the latest, showed that some progress had been made in the application of the exact sciences in designing works, so as to insure the greatest economy both of labour and of material; and it was in this direction, the combination of theory with practice, that the younger members of the profession must look to maintain their relative positions in the world. With a view of informing the members as to the state of engineering on the continent, in the United States, and in the colonies, the council had, during the last two years, caused an epitome of some of the most important papers in foreign transactions and periodicals to be embodied in the proceedings. These abstracts had included descriptions of works, studies of a purely theoretical nature, and memoirs and results of costly and elaborate experiments, the details of which were not to be found in any other English publication. In addition to the ordinary meetings there were fifteen supplemental meetings for the reading and discussion of papers exclusively by students, nine of whom had been considered deserving of Miller Prizes. The council had recently determined to print in the proceedings any papers by students that contained such original information as to warrant their appearing in the publications.

The property of the institution comprised securities of the nominal value of £14,322 3s. 1d. held in trust for various purposes, of £22,494 1s. 8d. invested on the general account, and of a cash balance of £326 11s. 7d., together £37,142 16s. 4d., as against £35,297 15s. 8d. last year. Also, the stock in hand of the forty-six volumes of the "Minutes of Proceedings," numbering together about 7,000 volumes; the collections of original drawings and of portraits of past-presidents and

other eminent engineers, to which a portrait of the late Mr. Joseph Miller had lately been added; and the library, unrivalled and unique of its kind, now containing 13,431 volumes, being an increase of 3,000 volumes during the past three years. These effects were insured for £10,000. The statement of accounts showed receipts in the twelve months amounting to £11,181 17s. 7d., made up of three items, viz.:—To the credit of income, £8,844 10s. 4d., to that of trust funds, £459 19s. 3d., and to capital, £1,877 8s. The payments might be summarized under five heads, thus:—By house and establishment charges, £1,864 12s., salaries and wages, £2,419 3s., library, £603 4s. 3d., publications, "Minutes of Proceedings," £4,055 15s. 4d., and by premiums under trust, £313 7s. 8d., while £1,847 17s. 3d. had been invested, and the cash balance was, as before stated, £326 11s. 7d. Favourable as these results appeared to be, they were not entirely so, as the liabilities to the printers and engravers, as well as to the several trust funds for unexpended dividends and to capital, were greater than at the same date last year. In fact, the expenditure now exceeded the income, though not the receipts, which comprised admissions and building-fund fees hitherto regarded as capital.

The report having been, after considerable discussion, adopted, the premiums and prizes were presented by the president, who congratulated the recipients upon the value of their contributions. A vote of thanks was then passed to the council, for their unremitting attention to the affairs of the corporation; and a similar vote to the president, for his zealous efforts to promote at all times the welfare of the institution and of its members, was carried by acclamation.

## ADVERSARIA HIBERNICA.

### LITERARY AND TECHNICAL.

"BLACK MAIL" is not yet extinct in the British Islands, but exists in many disagreeable forms. The bards who, as an order, were retained by kings and chiefs, and exercised their calling in pronouncing eulogies or curses, have disappeared; but there are still many free-lances who wield satire or scandal, with considerable effect, in obtaining their various ends. The *acir*, or satire, of the old Irish bards was looked upon as an instrument of physical mischief, capable of destroying the life and property, as well as the peace of mind, of the person against whom it was directed. Many exactions were submitted to on the part of the early Irish sooner than incur the displeasure of the bards, for they feared the terrible curses of these unscrupulous fellows. In one of the interesting notes to Dr. Samuel Ferguson's poem of "Congal" some entertaining particulars will be found relating to the subject, in its ancient and modern phases. He writes: "The efforts for the eradication of the order, made by the Irish themselves, were vigorously renewed by the Anglo-Norman Parliaments: but notwithstanding all the enactments against bards and rhymers with which our statute-book abounds, society continued to be infested by vagabond adulators and satirists down to the early part of the present century. The last of the race appears to have been one O'Kelly, who published his 'Bardic Visitation of Connaught and Leinster' in 1812. His book has a list of upwards of 3,000 subscribers. Some of his encomiums are not wanting in neatness, and he displays great versatility in varying his laudatory formulas. His lampoons, when he failed to find subscribers, are coarse but vigorous, and must have been eminently annoying. That he should have escaped personal chastisement, in the then state of Irish society, is only to be accounted for by the lingering superstition which still invested the bard, however unworthy, with the security of a quasi-sacred calling."

The O'Kelly above alluded to is, we believe, the identical Patrick O'Kelly, of the County Galway, who celebrated, in a string of terrible curses, his malediction upon the town of Doneraile, in Cork, where he had his watch-chain and seal stolen from him. Poor Doneraile had curses—Ossa upon Pelion—heaped upon her, and the wonder is, if the curses were worth aught, the unfortunate town ever survived O'Kelly's wrath. The Lady

Doneraile of that day, hearing of the bard's less, presented him with a magnificent new gold watch, with chain and seal, and thereupon O'Kelly was so much overjoyed he wrote "The Palinode," giving Doneraile and its denizens complete absolution for their sins, which he did by retracting the curses, one by one, in the most ample manner. O'Kelly's book is now scarce, and little is heard of his other lucubrations, with the exception of his "curse" and "blessing" of Doneraile, which occasionally turns up in Irish and Irish-American papers.

Since O'Kelly's day we have had in Ireland and England many slavish adulators and satirists, prosaical and poetical. The celebrated Watty Cox and his co-labourers, in his *Irish Magazine*, between 1807 and 1814, wielded satire and coarse abuse with effect; but it was mostly of a political kind, and directed against the loyalists of his time, and politicians who were untrue to their early principles.

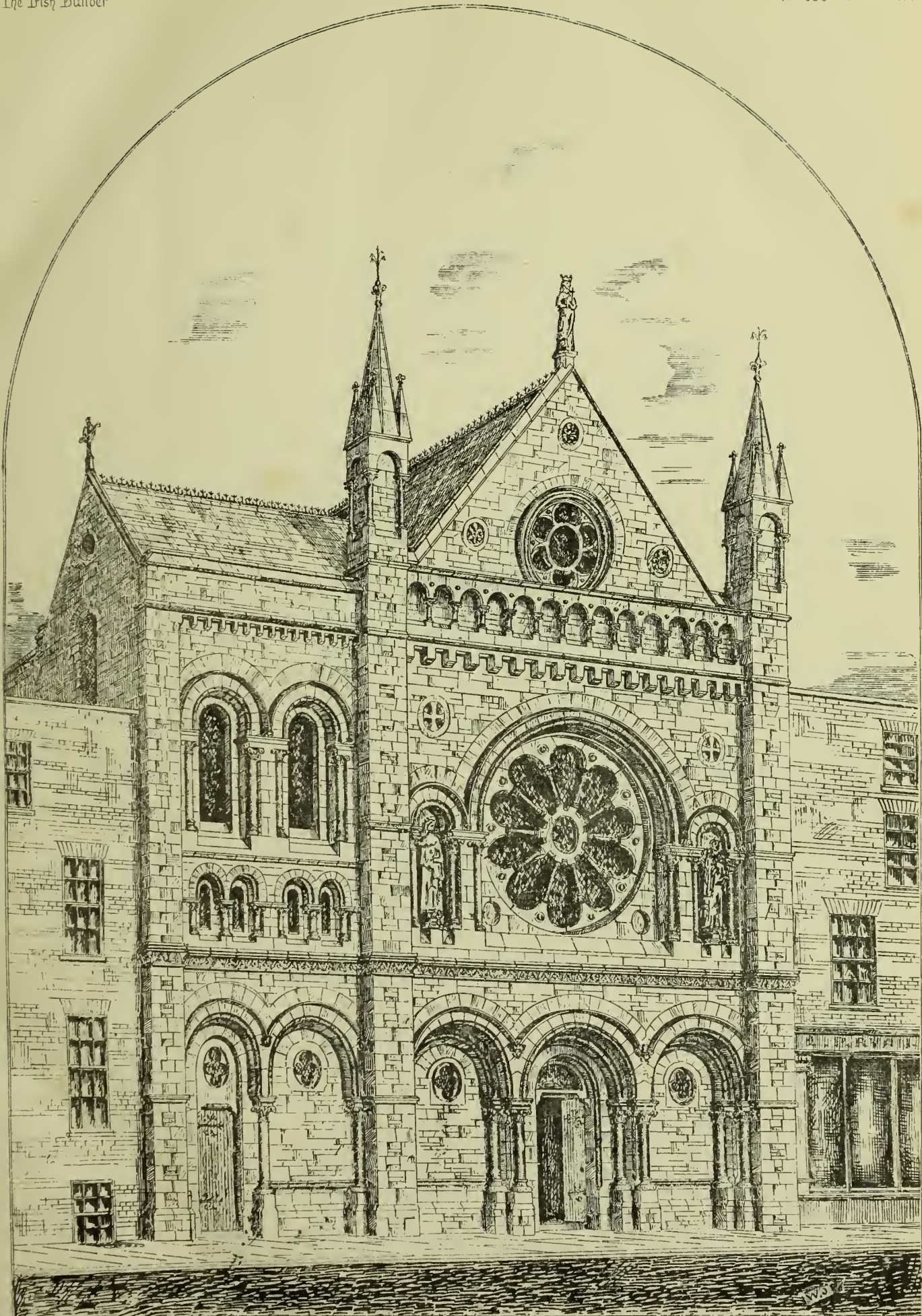
The writings of the *Age* and *Satirist* are remembered by several still living, and in more recent times the *Dublin World* obtained an unenvied notoriety for its attacks on certain political parties which existed in its time. It was also credited with exacting black mail under threat of exposing family scandals. We note these facts merely as historical matters, and not for any political purpose. The original *Paddy Kelly's Budget*, the most able of its name, dealt in a large amount of wholesale bitter scandal, that was but feebly and coarsely imitated afterwards by other "rags" bearing that name.

There lately existed in London, and perhaps still exists, for aught we know, a weekly newspaper notorious for its attacks upon individuals and public bodies, and it is whispered that its proprietor has made a very good living by his exactions, in cases where he threatened to expose, and hesitated when he received what he wanted. Such "vermin" and "pests of society" as these fellows and their journals ought to be stamped out without quarter or mercy.

The old satiric bards have indeed died out, and 'tis well; but there are some excuses to be urged in their favour, considering the period in which they lived; but for the journalistic black-mailers and blackguards of these times there exists no excuse. Honest and fearless criticism is still needed, and will, we fear, be long needed; but purchased slavish adulation or purchased immunity from foul and scandalous attack ought to be no longer possible. While men are found weak, fearful, and yielding, rascals will be found strong, unscrupulous, and equal to the emergency for reaping their harvest. We are not opposed to keen and scholarly satire, either in prose or verse; but we are opposed to vile personalities, gratuitous falsehoods, and the public ventilation of family scandals. We do not believe in curses; and if our enemies (if we have any) are, like the old bards, inclined to try their hands or tongues at maledictions, we have no objection to their cursing on till the "crack of doom."

On the 18th of January, 1793, a somewhat remarkable incident took place at Crow-street theatre, then under the management of Mr. Daly. At the end of the opera, Mr. Betterton, who played Lackland, came forward on the stage, and in a pathetic manner complained of the treatment he had received from the manager, who, he said, had not only deprived him of his cast of parts, but refused to pay him his salary, in consequence of which he and his wife and children were almost starving. This appeal aroused the indignation of the audience, and Daly, the manager, was loudly and repeatedly called for. Hitchcock, the deputy-manager [author of the "Historical View of the Irish Stage"], came forward, but he would not be listened to. On the following Monday, a long address to the public appeared in the *Hibernian Journal* from Mr. Daly, refuting the charges alleged against him. The affair at the time was most annoying to the manager, for Mr. and Mrs. Daly, who had retired from the stage





+ NEW · TRANSEPT · CHURCH · OF · S<sup>ts</sup> · TERESA · DUBLIN ·

O'NEILL  
AND  
BYRNE } ARCHITECTS.

Photo Lith The City Printing Co<sup>y</sup> 21, William St

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for upwards of four years, had been announced to reappear on the Monday evening following. On the night of the 21st the "Jealous Wife," Mr. and Mrs. Oakley, was acted by Mr. and Mrs. Daly, and other pieces followed, before a numerous audience. The manager and his wife were well received, but amidst the plaudits that greeted both, there were some evident marks of disapprobation. Mr. Daly came forward and said that if any gentleman present would take the trouble of examining the statement he published and declared it was not just, he was willing to make any apology the audience would demand. The audience on hearing this avowal allowed the play to be proceeded with, Mrs. Daly's acting being warmly applauded. At the conclusion of the play Mr. Daly again addressed the audience, returning thanks for the support he had received, and in alluding to the complaint of Betterton said that it never was his intention or inclination to distress an individual, and that if it met with the public approbation he would forget all that had passed, and restore Mr. Betterton to his situation in the theatre. This statement fully satisfied the audience. The stage is certainly not the place now-a-days for settling disputes between managers and performers, but, perhaps, poor Betterton, at the time, could command no other channel of publicity. He certainly felt aggrieved, and his case was a hard one, and he did not appeal, as we see, to the sympathies of the public in vain. We have a Press now for poor and rich, actors and others, to ventilate their real or supposed wrongs; but, unfortunately, there is still much wrong doing, both in connection with the Stage and the Press. Many things are now puffed up that should be unceremoniously puffed out in the interest of the common weal, and as a warning to evil doers "to mend their line and sin no more."

The date of the introduction of modern railways need not be told, for thousands are still living who remember the event. It is difficult, however, to trace the date of the introduction of railways apart from the modern steam locomotive. Down to the year 1600 and afterwards, coal was conveyed from the pits at Newcastle to the shipping places in carts upon the ordinary roads, and even in some instances by "panniers" on horse-back.

In a work entitled "A Chirographia," published at Newcastle-on-Tyne in 1649 by a Mr. Gray, we have it stated that "Master Beaumont, a gentleman of great ingenuity and rare parts, adventured into our mines with his £30,000, who brought with him many rare engines not known then in those parts—as the art to boore with iron rodde, to try the deepnesse and thickness of the coale, rare engines to draw the water out of the pits, waggons with one horse to carry down coales from the pits to the staykes in the river, &c. Within a few years he consumed all his money, and rode home upon his light horse." Master Beaumont was not the only inventor or railway reformer who expended his fortune for the benefit of the nation. His waggons were most likely constructed to run upon a laid-down rail; and, if so, the introduction of rail-ways apart from the common road dates between the beginning of the seventeenth century and its middle.

In Roger North's "Life of Lord Keeper North" we have a more certain and precise account of the construction of a rail-way at Newcastle-on-Tyne. We are told that in 1676 the coals were conveyed from the mines to the banks of the river "by laying rails of timber exactly straight and parallel, and bulky carts were made with four rollers fitting these rails, whereby the carriage was made so easy that one horse could draw four or five chaldrons of coal."

One hundred years exactly passed after this when a Mr. Carr, in 1776, constructed an iron rail-road at the Sheffield colliery. The rails were supported by wooden sleepers, to which they were nailed. Cast-iron rails

appear to have been made for the first time at Colebrook Dale, in Shropshire, in 1767. In 1797, stone sleepers were used at a colliery near Newcastle, and in 1800 they were again made use of in a rail-road at Little Eaton, in Derbyshire. A quarter of a century later iron rails and stone sleepers were employed in the Stockton and Darlington Railway, which was completed in 1825. From this period dates the commencement of our regular inland conveyance on regular railways run over by steam locomotives. Soon followed railway bills and new railway lines in the sister kingdom, and shortly the project of the Dublin and Kingstown Railway became an accomplished fact. It is strange that so many years were allowed to pass between the completion of our first Irish railway before another was completed. The first pioneers of our railways are almost forgotten, in the greed for modern wealth. Railway companies now project them to enrich themselves, and to place the public under a great obligation in consenting to carry them for payment, and with safety not warranted. H.

#### THE DISPOSAL OF SEWAGE.\*

I BELIEVE that there will be little variety of opinion as regards dealing with the solid or dry refuse. The producers of this should find means of disposing of it otherwise than by throwing it into running water, and the practice should in future be prohibited by law. It may be as well here to describe generally and briefly some of the systems proposed or in use for dealing with liquid refuse or sewage. These may be classed as follows: viz. gravitation, irrigation, filtration, and chemical treatment.

*Gravitation.*—The first and most natural is the gravitation system, which consists in conducting the sewage by pipes or covered conduits to some point, provided such a point can be found, where it may be discharged. It must be borne in mind that this system of gravitation, to a certain extent, is common nearly to all other systems. The sewage must be conducted, either by gravitation or pumping, to some place where it may be dealt with, and in large towns, if it is to be applied to irrigation, it must be led to some distant place. The Liernur system, by the creation of a vacuum, draws sewage from given districts to central depots, where it is proposed to be dried by the application of heat; but that system could only deal with a portion of the polluted liquids of a town; and whether the sewage is ultimately to be used in fertilizing the land, or is to be rendered innocuous by chemical treatment or filtration, up to a certain point it must flow in artificially-constructed channels by gravitation alone, or with the assistance of pumping when the fall is insufficient.

*Irrigation.*—By the irrigation system is meant the distribution of sewage over the land, whereby, if the soil be of a suitable character, and the area irrigated large enough in proportion to the sewage distributed over it, the liquid flowing from the land is rendered comparatively pure and inoffensive. This system has been tried more or less completely, and with varying success, at Edinburgh, Croydon, Rugby, Carlisle, and many other places. Where there is soil of a suitable description and land available to which the sewage can be conveyed at a moderate outlay, and so situated as to prevent the sewage farm from becoming a nuisance, it may be employed with advantage. But its application on a large scale is beset with many difficulties. The opposition of surrounding proprietors to the proposal to place vast sewage farms in their neighbourhood would, in many cases, be great and proportionately costly, and in some cases fatal. The cost of distribution of sewage over the land would not increase in direct proportion to the area irrigated, but at a greater rate; nor have we any experience of how far the nuisance of a large area of many thousand

acres irrigated with sewage would extend. On these grounds it is not safe to argue, from small irrigation farms to large ones, either from an economical or a sanitary point of view. There may be cases where, on a moderate scale, irrigation may prove a good method, and in some such cases it may be the best.

*Filtration.*—The filtration system consists in passing the sewage through artificially-constructed filter beds, or through the soil when that is suitable. A fair trial was given during three years to the system of filtration through artificial filters at Rugby, and it resulted in failure. The difficulty of disposing of the solid matters, retained in the form of an offensive sludge by the filters, except on a comparatively small scale, would be great, and it would, I think, be impracticable to deal with a large amount of sewage by this system alone.

*Chemical Treatment.*—Several companies have been formed, and many patents have been taken out of late years, for the deodorization of sewage by chemical treatment, and the preparation of saleable manure from it. Purchasers have not been found for the manures which have been made, though the quantities manufactured hitherto have not been large. In some cases the manures have proved worthless, and have been allowed to accumulate in the neighbourhood of the works. Some of them, no doubt, possess valuable qualities to a limited extent, and as these qualities become better known, purchasers will be more readily found for them. Still, though the cost of treatment of the sewage may be reduced by the sale of the manure, the cost of the substances used for deodorization will probably rise as the demand for them increases. The cost of treatment has in many cases been calculated on the basis that some of these substances would be obtained for nothing, or at nominal rates, as the waste products of manufacturing processes; but they would rapidly become marketable commodities, as in some cases they have already done, even with the small demand which has arisen for them. By the addition of certain chemical substances in proper proportions, the solid matters in sewage may be precipitated and rendered inoffensive; and if the effluent water be afterwards passed over artificially-constructed filters, or over suitable land so as to oxidize the matters in solution, the effluent water may be rendered tolerably pure. The chief objection to the system at present is its costliness, and that it is still in an experimental state. The Patent Sewage and Manure Company undertook to deal with the sewage of Coventry free of charge; but instead of the profit they had anticipated, the cost of treating the sewage, amounting to 2,000,000 gallons a day, is now about £10 a day, exclusive of the interest on the cost of the works and depreciation of plant. Their machinery for making the sludge into manure was not, however, complete when I received this information respecting the cost of their process. The Corporation of Leeds are now dealing with the sewage of that town on a system somewhat similar to that patented by the Native Guano Company. The sewage amounts to about 12,000,000 gallons a day, and on this quantity £15,000 a year is expended at the sewage works on labour, materials, and pumping alone. The cost of the works, including land, was about £48,000. The effluent water at Leeds is not by any means pure, but might be rendered so by a larger expenditure in deodorizing substances and precipitants, and by an outlay on filter beds. For the effectual chemical treatment of the quantity there dealt with, at least £20,000 a year would be required, as I am informed by Mr. Crookes, F.R.S., the chairman of the Native Guano Company, who takes great interest in these works. An official trial of the Native Guano Company's process (known as the A B C process) was made at the Crossness outfall of the Metropolitan Drainage Works. In Sir Joseph Bazalgette's and Mr. Keates' reports on the trial, it was shown that the cost of making

\* From Report of Sir John Hawshaw on the Purification of the River Clyde.



a ton of native guano far exceeded the amount which it could reasonably be hoped to realize when offered for sale. From reports which have been submitted to me on other processes which have any claim to efficiency, I find that in all cases the cost of manufacturing the artificial manure from sewage would greatly exceed the sum which its sale could be expected to produce.

In his "General Remarks" on winding up his report the author says:—

In the present state of science and of knowledge on this complex subject, and during the time when new methods and processes are being propounded from day to day, to stereotype further than may be necessary any of those processes would be unwise. It is better to leave parties from time to time to adopt the best then known, and to raise the standard of purity as experience may warrant.

The advocates of several processes of deodorization think they may be worked at a profit. I have as yet found no proof of this. At the same time, I should not deem such proof necessary in order to justify their use in some cases. Outfall sewers are not sources of profit. The question to be determined in each case is, What is the best available method for adoption, cost being a great but not the only element in the consideration? Deodorization and irrigation schemes may be applicable and suitable in cases where it can be shown that no better and cheaper methods can be found. It is not necessary to prove, though it would be a happy circumstance if it could be proved, that the pollution of streams and rivers can be prevented, and the sanitary condition of towns and villages improved, without cost. Expenditure within reasonable limits will have to be and ought to be incurred wherever it becomes necessary. I am not aware of any, and indeed I feel confident there is, no single method of dealing with this question capable of universal application.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

"RICHARD III." was advertised for representation, and we are told that it was "the first trial play after the grand riot," of which some details have been given. Threats had been uttered against Sheridan, and freely circulated, that he would never again be permitted to perform until he made submission—in fact, made an abject apology, and eat dirt, to satisfy his enemies, who were in fact at this time the enemies of the public. The respectable citizens and playgoers were, however, at last determined that faction should no longer have its way. Assured of protection, the night arrived, and Sheridan was dressed for his character. The house filled well; many ladies and gentlemen, and citizens of distinction came purposely on this occasion. Several of the University students came also to the theatre, but dispersed themselves here and there, chiefly in the pit, so that no appearance of a concerted action on their part might be detected. The disturbers on this night came into the theatre late, in small groups, and mostly seated themselves in the boxes. The play opened in quietness, but at the end of the first act, when Richard made his appearance, a noise was heard, increasing louder from different parts of the house, but particularly from the boxes, and several voices were heard exclaiming "A submission! a submission! a submission!—off! off! off!" Sheridan advanced to the front, bowing respectfully to his audience; but his voice was instantly drowned by voices louder but more cheerily in tone than the former ones, distinctly and emphatically exclaiming "No submission; no submission! no submission! Go on with the play!" The celebrated Charles Lucas, who was present in the pit, rose up and manfully at the critical moment proclaimed the freedom of the Stage and the

rights of the audience. To use Hitchcock's account, Lucas "expressed his astonishment and detestation of men bringing their private quarrels with managers or players into the theatre, and such he apprehended the present case to be; but since the dispute was introduced, it must, like other disputes there, be determined by the majority. He presumed every sober person in the house came to receive the entertainment provided in the bills, for which he paid his money at the door. The actors then, he observed, were the servants of the audience, and under their protection during that performance, and he looked upon every insult or interruption given to them in discharge of their duty as offered to the audience. He apprehended the matter in dispute was no breach of the duty of the manager or actors, cognisable to any persons present; but whether it were so, or thought otherwise by the house, the question might easily be determined. He, therefore, moved that those who were for preserving the decency and freedom of the Stage should distinguish themselves by the holding up of hands, judging that when they should come to know their numbers and superiority they would silence or turn out their opponents."

Lucas was heard with respect and greatly applauded, and a division when taken soon showed that the rioters were in a miserable minority. Finding that the tables might be suddenly turned upon them in a more startling manner, the rioters suddenly withdrew, and the performance proceeded on quietly to the end. Though foiled in their purposes on this night, the rioters and their leaders were still determined to wreak their vengeance upon the manager and all those who defended him. Lucas was selected for annoyance, and a few days after his noble conduct above described he was met by a number of gentlemen ruffians and assaulted in the street. He issued an advertisement the next day, which was circulated over the city, informing the public that a number of disorderly persons, assuming the habits of gentlemen, who had for some time back infested the public places and disturbed the peace of the theatre, had assaulted him, and he offered five pounds for the apprehension and conviction of any of the offenders. About this time, and before the riot, the play of the "Fair Penitent" had been announced for the annual benefit of the Hospital for Incurables. The governors of the hospital on this occasion sent word to the manager that they would take upon them to defend him on the night of their benefit play. Sheridan was to act the character of Horatio. The governors came to the conclusion that no body or class of men, particularly those calling themselves gentlemen, would oppose a play in the aid of charity, particularly too as "ladies of quality" exerted their interests, and were to honour it with their presence in numbers. Arrangements were perfected, bills posted, and the governors of the hospital proceeded early to the theatre with their white wands. The boxes and pit, that would have been filled with ladies, were early taken possession of by thirty gentlemen, and these proceeded to occupy the middle of two or three benches near the spikes of the orchestra. As it was there were upwards of a hundred ladies seated on the stage when the curtain raised. The house presented a brilliant appearance. Sheridan was honoured by being ushered in by the governors, but as he came to the front he was ordered off by those thirty armed disturbers in the pit, assisted by some few others in the galleries. Sheridan withdrew, and then commenced disputes between the governors on the stage and the bullies in the pit, resulting in uproar and challenges. We read that among the governors was a student of the university in his bachelor's gown at whom a gentleman near the spikes of the pit flung an apple, calling him a scoundrel at the same time, and adding that they were all scoundrels. The scholar, feeling the affront, made off to the college, returning in twenty minutes with a number of comrades armed for the

combat. The rioters, had luckily for themselves, left the pit a few minutes before the college boys arrived. To prevent further disturbance it was agreed by the managers of the charity and Sheridan to dismiss the house, so the collegians were obliged to return home. However, the next day they seized a number of the principal disturbers, and the first and greatest offender was compelled to kneel down on his bare knees in the courts of the college, and to repeat a form they had prepared for him. The others were excused kneeling, but had to read their submission, and ask the pardon of the college.

The lords justices next interfered in the interest of law and order, and the Master of the Revels is instructed to shut up the theatre by his authority. There is work for the lawyers in preparation. A young gentleman who assaulted Sheridan is taken up, and Sheridan has to meet a counter charge for beating the young gentleman. Reports and rumours and wagers on the events are rife. The trials are looked forth to with intense interest. Indeed, we are told that nobody at that time would believe a Dublin jury would "find a gentleman guilty." Those, however, who hugged the illusion were soon undeceived. Marley was the lord-justice at the period, and he sent for the sheriff, as the time drew near, and directed him to bring a list of sufficient and able jurors. When the case was opened in court, Sheridan, as first charged offender, was heard for beating "the gentleman," for so Kelly, the chief disturber, was called, and no doubt considered himself. The jury, however, were convinced, when they heard the evidence of three or four respectable witnesses, that "the gentleman" made use of such abusive and provoking language to Sheridan in his dressing-room as compelled him to chastise him. As no other person touched "the gentleman," and as he received all his beating from the manager, the jury acquitted Sheridan without leaving their box.

Next Kelly appeared at the bar, and several witnesses were examined. There was ample evidence forthcoming on the part of those connected to prove the whole of the facts charged in the indictment. During the trial, when Sheridan was on the table answering the questions put to him by the court and bench, the prisoner's counsel, thinking to make a fine point, got up and said "he wanted to see a curiosity. I have often seen (he repeated) a gentleman soldier and a gentleman taylor, but I have never seen a gentleman player!" Sheridan was equal to the occasion in replying to the insult of the unmannerly lawyer by modestly bowing, and replying without the least embarrassment, "Sir, I hope you see one now!" A loud murmur of applause, we hear, ran through the court, and the foiled counsellor laughed at the wrong side of his mouth. Gifted with effrontery, he sat down, and ventured on no more questions. Both of these cases were tried by Justice Ward in the presence of the Lord Chief Justice and a full bench. The jury found the "gentleman" prisoner guilty, who was sentenced to a fine of £500 and three months' imprisonment—a sentence not by any means too severe, but one richly deserved. The Lord Chief Justice, after pronouncing sentence, took occasion to observe that attention in future should be given to the conduct of these gentlemen at the theatre, that it was a place of public resort, and that any person forcing his way behind the scenes where no money was taken, if apprehended and the fact proved in that court, should feel the utmost severity of the law.

Though Kelly counted on liberal support before the action was tried, he found to his chagrin and sorrow almost deserted. No hundreds of pounds were subscribed to defend him, and repentance at last came to touch his heart after a week's confinement in prison. Becoming sensible of his folly, we find him at last obliged to apply to Sheridan, the very man he did his best to ruin, to intercede on his behalf. Sheridan asked the

\* See ante.



Government to relinquish the fine, and his request was granted; but he did more than this for his enemy, he actually became solicitor and bail himself to the Court of King's Bench for the enlargement of the prisoner.

What was hoped for, sought for, and at last perforce fought for—the reform of the Irish Stage—came at last through the untiring efforts of Sheridan, backed with the sympathy of good and valuable citizens and a growing healthy public opinion. Redress, too, came for manager and actors, and henceforward respect was paid to the scenes of the then Theatre Royal of Dublin which previously no other theatre could command. From that day forward, although occasional acts of violence occurred, still no “man of quality” or other man in the country asked or attempted to force his way on the stage or behind the scenes without permission. Before, every bully or would-be gentleman who carried a sword was wont to draw it upon the stage door-keeper or other assistant, if denied an entrance to any part of the theatre his swaggering and overbearing ambition suggested. Thus was, to use the words of the author of the “View of the Irish Stage,” “the long-usurped tyranny of a set of wanton, dissolute gentlemen (the greatest nuisance that any city ever groaned under) effectively subdued, and the liberties of the people recovered by a spirited public, aided by a worthy lord chief justice and an honest jury.”

Having now dilated for some length upon the incidents of the early days of Sheridan's management of the Dublin stage, we will proceed to treat of the business proper, and the engagements and attractions secured by the manager for his patrons at the period at which we have now arrived.

## THE ARTISANS' DWELLINGS ACT.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—In Mr. Gray's speech in the Town Council the idea is conveyed that the Dublin Corporation labour under some exceptional disadvantages in putting this act into operation, as compared with corporations on the other side of the Channel.

As Birmingham is especially mentioned as favoured in a way that it is only hoped that Dublin may be, I think it is well that we should have before us what did take place in that borough. In the first place, the Corporation of Birmingham, although promoting a very much larger scheme of improvement, did not, like the Corporation of Dublin, go in the first instance to the Treasury for a loan of £1,000 for “preliminary expenses.” On the contrary, with a manly, independent spirit they confided in the goodness of their cause, and undertook the payment of preliminary expenses out of their own resources. These expenses were small, for a reason deserving of notice. The mayor of Birmingham (Mr. Chamberlain, M.P.) undertook the conduct of the case, on behalf of his corporation, before the Local Government inspector, and did so, I need hardly add, without fee or reward of a pecuniary character. Is there to be found in the Dublin Corporation a like disinterested zeal for the public welfare? If there is, no one need be frightened at the preliminary expenses. The inquiry before the Local Government inspector will be into a few matters of fact, which may be dealt with by any gentleman of ordinary ability. There is no need to overwhelm the inspector with a flood of professional eloquence, or to mystify him with subtle “law points.”

The Artisans' Dwellings Act is the same for Ireland as for England. No English corporation under it has got from Government a loan of £1,000, or any other sum, for preliminary expenses. There is no reason to suppose the Irish will be less ready than the English Local Government inspectors to report favourably. On the contrary, it is well known that the Irish board passes provisional orders much more freely than the English board. We have, in fact, no grievance what-

ever to complain of. £1,000 was an excessive sum to appropriate for mere preliminary expenses under, as intended to be, the economical provisional order procedure. The Treasury, in declining to lend such a sum for the purpose, have given the Dublin Corporation a useful hint, and have been mindful of the Dublin ratepayers' interests.

J. Evoy.

Dublin, December 30; 1876.

## MEMORIALS.

A TABLET to the memory of the late Dr. Thomas Edward Beatty has been placed on the northern wall of the nave of St. Patrick's Cathedral, in close proximity to the statues of Dean Dawson and Captain Boyd. The design comprises a central shield of white marble, laid upon a ground of black marble. The shield bears the inscription: “This tablet is erected by his professional friends to the memory of Thomas Edward Beatty, M.D., President of the Royal College of Surgeons in Ireland, 1850; President of the King and Queen's College of Physicians, 1864; who died on the 3rd May, 1872, in the 73rd year of his age. Of noble nature, generous, kind, and just, he lived and died beloved of all who knew him.”

A font, of chaste design, has been placed in the parish church of Clonmore, Diocese of Ferns, in memory of the late Captain G. G. Richards. The bowl and plinth are composed of Sicilian marble, the capital is of Caen stone carved; while a four-cluster pillar of Cork red marble supports the bowl. The cost was about £70.

It has been decided to erect a statue in the Hall of the Four Courts to the memory of the late Lord Chief-Justice of Ireland, James Whiteside.

## THE BROMSGROVE SEWAGE WORKS.

THESE works, which have just been completed at a cost of about £3,500, were formally opened by the members of the Bromsgrove Local Board on the 30th November. They are situated in a field near Churford Mill, containing about four acres, upwards of two of which are covered by the different filtering-beds. Some five years ago the Board was threatened with an injunction to restrain them from turning the sewage into the town brook, and causing a nuisance by contaminating the stream. They called in the services of Mr. Bailey Denton, engineer, who advised them to purchase about forty acres of land and carry the sewage a mile away from the present site, which would have cost about £20,000. The Board did not feel justified in expending so large a sum, and called into requisition the services of Mr. Taylor, engineer, who prepared plans, which were approved. The consent of the Local Government Board was obtained, and the works were carried out by Messrs. Brazier and Weaver, of Bromsgrove. The sewage is conveyed from the town by a pipe sewer a distance of half a mile, and at the outfall is led into a duplicate set of subsiding-tanks and filter-beds. From the outfall it flows into a shallow tank, having an area of 200 ft. In this tank the heavy matter of the sewage precipitates itself. The sewage then passes into a second subsiding-tank, having an area of 900 ft., and at the end of this tank is a wall containing a number of pipes through which the sewage passes, and when the tanks are full these pipes are below the water, which prevents the floating matter in the sewage passing beyond the wall. It then runs into a subsiding tank, with an area of 1,600 ft., in which further subsidence takes place. Beyond this tank is constructed a filter-bed of 600 ft. area, in which is fixed a perforated floor, covered with engine ashes; the sewage, passing upward and through the ashes, goes over a weir 30 ft. wide, by which a very gentle motion is given to the water. It then reaches a fifth tank, and beyond this

is another filter, constructed similarly to the first, but having a larger area, and being a downward filter, the sewage passing through the ashes, and thence into an open carrier, which conveys it to the land-filters. Each tank is built and paved with brick, the bottom being made to slope to the centre into a well or pit, at the bottom of which is a large brass valve. Into this pit the mud is swept, and passes through the valve into a mud pit 18 ft. deep, in which is fixed a strong chain-pump, which is worked by two men. By this means the mud is raised to the surface, dried, and sold for manure. The whole of the tanks, wells, &c., are in duplicate, so that one set can be cleaned while the other is at work. After passing through this system of filtration the sewage goes into the land filters, fifty in number, each having an area of 2,500 ft., formed by levelling the land, and raising round each bed an earth embankment. The land has been closely drained, upwards of three miles of pipes having been used. The sewage passes from the open carriers through sluices into pipes, and on to each bed. The surface soil of each bed is thrown into furrows, and the sewage gradually filters through the ground into the drains, which empty into the main drain. The water comes out clear and bright into the brook. Arrangements have been made for dealing with storm water. Several gentlemen tasted the water and pronounced it “good.”

## CORPORATE ITEMS.

THE Lords of the Treasury have refused to sanction the loan of £1,000, applied for by the Municipal Council, for the purpose of paying expenses in the preparation of a scheme, under the “Artisans' Dwellings Act.” “My Lords” say that they are not inclined to receive the application favourably, as it is only for works that would be unquestionably carried out that loans would be given, and that there was no such certainty in the case submitted to them.

Several inhabitants of the South Dock Ward complain of annoyance caused by the flooding of their premises. They were comforted by the officials telling them that such floodings were inevitable, and could only be prevented by employing engines to pump the water out of the sewers, when flooded. Job's comforters!

Another growl comes to the City Fathers from the “officials of the Custom House.” In walking on the footway at Lower Abbey-street, they say they incur risk by the passing of timber, planks, &c., in and out of the saw-mill premises belonging to Messrs. John Martin and Son. A 1 to look into the matter forthwith.

In consequence of the large number of applications for the appointment of Deputy City Surveyor, it has been resolved to submit the names, in the first instance, to a committee, who will select a certain number from amongst the applicants, and submit them to the Council to choose one. The salary commences at £350 a-year.

On a motion of Dr. Norwood on Saturday, that St. Andrew-street should be paved with asphalt, Alderman Manning objected thereto, and said the inhabitants of Grafton-street had, at great expense, got that street asphalted, and the other day he received a bill for a considerable sum, £25—the wages of a man and a boy who were employed to keep the street clean. He was the “chief scavenger” for the street, for whenever any mud or dirt was seen in it people came to him as a member of the Corporation, and said “Why is this so?” He would in future object to the laying of any more asphalt, unless some arrangement was arrived at for keeping it clean. Mr. Bury said there were a great many complaints as to the asphalt in Mary-street, and the people there would remove it if they could. In fact it appeared that asphalt was not suited to their requirements at all.



## CHURCH OF ST. TERESA, CLARENDON-STREET.

WITH our present issue we give an illustration of the front of a new addition to the above church, which is now nearing completion, from the designs and under the superintendence of Messrs. O'Neill and Byrne, architects. The style is Romanesque. The plan comprises—transept, library, four sitting-rooms, hall, and staircase. The transept is 53 ft. in length by 30 ft. in width, measured within the walls, and in height 37 ft. 6 in. to apex of ceiling, which is groined in plaster to correspond with that of the old portion of the building. The library is 30 ft. by 20 ft. by 17 ft. 6 in. in height, and is lighted from the roof.

The front is composed of Dalkey granite in coursed ashlar; the dressings are of same material and Portland. The arcades and windows are elaborately moulded, and enriched with columns of polished Dalkey granite; the shafts of pinnacles are of polished Newry granite. The wheel window is filled with stained glass, designed and executed by Messrs. Earley and Powells of Camden-street works. The figures in niches and on apex of gable have been executed by Messrs. Neill and Pearce, Great Brunswick-street. The carving on front by De Groot. The work was creditably carried out by Messrs. Meade and Son, Great Brunswick-street.

## THE HISTORICAL DEVELOPMENT OF ART.\*

IT is not our purpose just now to enter into an analysis of this book, for it needs a careful reading, and though dealing with the development of art as a whole, under various forms, from the earliest times to our own, yet the work embraces much more than a treatise of art *per se*.

Nature and human nature, instincts, tastes, influences indigenous to uncivilised man, and to the partially civilised though still uneducated, are considered in their bearings on the early development of art, as well as the scholastic influences of later times. The work throughout evidences much thought and research, and its scope will be understood when the reader is told that the author divides his work into eleven chapters, as follows: Prolegomena; Ethnology in its bearing on Art; Pre-Historic and Savage Art; Chinese Art; Indian, Persian, Assyrian, and Babylonian Art; Egyptian Art; Hebrew Art; Greek Art; Etruscan Art; Roman and Early Christian Art. There is scarcely a chapter of the work which will not suggest other considerations in addition to those dwelt upon by the author. Whether the theory or theories broached are accepted or not in their integrity in relation to art development and influences, one thing is clear to our mind, that, considering the wide range of subjects dealt with, the author has built up his art-structure with a great amount of pains—taking care, and though some of the materials in his edifice may be faulty, and a few of the stones hereafter need removal for better insertion, the work, as a whole, will stand. "We may," says Dr. Zerfli, in his Prolegomena, "treat art from three different points of view—first, from a realistic point of view, taking nature and geometry as its basis; secondly, from an historical point of view, showing by antiquarian and archaeological researches its gradual development; and, thirdly, from a critical point of view, propounding abstract principles of speculative philosophy and

aesthetics as applied to art." His illustrations of these points of view, we will give in his own words:—

"The realistic school has, in later years, had an immense influence with us. Art-critics have almost gone so far as to demand from the artist a correct rendering of the very stratification of the rocks, or of the different kinds of soil, to such a degree that the farmer should be able to recognise the ground in which to sow oats or wheat. Pictures, according to these aestheticists, should be geological maps, mineralogical collections; and, so far as flowers are concerned, perfect herbariums. When the school takes up the archaeological view, it clings, with indomitable tenacity, to given forms and checks imagination. Art is, then, only to be handled as the Greeks or Romans practised it. Either the Gothic or the Renaissance style is to be slavishly imitated. This school has one great drawback: it considers all things natural, beautiful, and looks upon imitation of that which *was* as better than an exertion of the self-creative originality of the artist.

"The historical school endeavours to bring before our eyes the past, so as to enable us to understand the present and to influence the future of art. This school has followed two divergent directions—the Antique and Gothic, the classical and the romantic, the one holding that everything beautiful must be based upon Greek patterns; the other that all beauty is confined to the Gothic. The writers of these two schools bewilder students, either driving them into a cold, soulless imitation of Classic forms, or forcing them to sacrifice everything to trefoils, pinnacles, tracery, finials, buttresses, thin spires, painted windows, and pointed arches.

"The critical school indulges in tall phrases, mere hypothetical paradoxes, startling the world with speculations of the wildest sort. Art-critics frequently roam in the sphere of surmises; they have their good points, but often neglect reality, or the historical ground; they sacrifice everything to the idea, which is with them the only productive basis of everything existing in art."

These are not unfair illustrations of the views of the disciples of the three schools, and Dr. Zerfli tries, he says, to be realistic in his treatment, considering "it would be vain to attempt to detach art from the influences of nature, as art borrows its principal elements from the impressions of natural phenomena;" but he is historical in pointing out the progressive development of art, and critical also, as a matter of necessity. He holds that speculative philosophy has its merits in art, and aesthetic criticism is suggestive of new ideas, and that new ideas engender new forms. In a word, he adopts from each of the three schools what is best, as the present is an age of eclecticism in art.

Further on, in considering man as a unit, a type, or a creation for art-study and influence, or as affording an illustration in the world of nature and art to be utilised in the development of art-principles or forms, Dr. Zerfli writes:—

"Man is altogether different from the products of the mineral and vegetable kingdoms, which give us the prototype of conventional art. Man is not in all directions symmetrical, in the strict sense of the word. He has not two heads, two noses, or two mouths. The component elements in man are different. His very nature revolts against planimetric treatment. This was perfectly understood by the masters of the arabesque, who have always turned man half into a fish, a plant, a serpent, a tendril, or some other form adapted for planimetric treatment. Eurythmy and proportion are the elements of higher organic form, to which must be added direction or action and, finally, expression."

It is quite true that man, save in abnormal cases, has not two heads, two noses, or two mouths; but he has, as admitted in the next chapter, two eyes, two ears, two cheeks, two opes in his nostrils, two lips, and, going down his body to the extremities, we will find several other dual forms complete counterparts of each other. Good types of the human form throughout (and there are many good types) are full of symmetry and proportion. Man, as executed in marble as a piece of sculpture, and as depicted on the canvas as a painting, are quite different forms. The first must be always the fullest, the truest, and most perfect embodiment, and the painting an incomplete one, though perfect as a

work of art as far as it can be developed, and full of life and expression as these terms are understood. Even leaves, whether of trees or flowering plants, though apparently much like are not, when closely examined, really so, yet, we must allow, there is a symmetry and proportion observable according to their nature in all of them. The photographic artist of these days reproduces their forms as they exist, but the artist of old in his selected and long kept to types, mostly reproduced the same forms over and over again, as if nature did not afford variations in plants of the same order. Proportion was studied, but the *fac similes* were those of a previously used pattern or model, and not the growing plant studied and re-studied for a better development and embodiment in art. We do not mean to say that artists of the old school of sculpture did not now and again study plant life as a means of better instruction; but the acanthus and the oak leaves of Greek and Roman art long centuries ago are still with us the same unvarying acanthus and oak leaves as if nature did not admit of variation, and the old Greek artist could draw better and more exact than what nature exhibited herself. What is essentially good ought to be always good if it be truthful resemblance, whether in plant life or animal life. Man has only one unalterable form as a living being, yet how great are the differences not only in stature and features, &c., between the people of one country and of another, and even in the people of the one nation or the one family circle. We are digressing; but the author's first chapter or "Prolegomena" is so suggestive that it is apt to lead one away into a world of thought. Dr. Zerfli describes crystallisations as "the first artistic products of unconscious nature," and in applying what he says of crystallisations to plants and animals, he finds that symmetry is undoubtedly the predominant element in every flower. Having discussed the formation of matter in crystals to man, he sets down the following five principal elements necessary to beauty in art. 1. Symmetry; 2. Eurythmy; 3. Proportion to Direction or Motion; and 5. Expression. A description of these elements concludes the "Prolegomena" or first chapter. The second chapter, as already stated, deals with "Ethnology in its bearing upon Art." It is a very interesting one, but we have not space or time at present to carry our remarks further, but will shortly return to the volume, for a general consideration of its contents.

## CORRESPONDENCE.

### "GLASNEVIN AND DRUMCONDRA DRAINAGE."

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—In yours of the 1st December, the remarks on the "Reports of the Engineers selected by the North Dublin Sanitary Board," appointed to advise as to a proper scheme for the above-named districts, are, to my mind, a fair comment on now public documents; and with which, to a great extent, I concur.

Our experience in sewage-farming, as a paying concern, is rather doubtful, and selecting building lots in the vicinity of our city to experiment upon would be exceedingly imprudent. The views of Mr. C. S. Read and Mr. Rawlinson, engineering inspectors, embodied in their late report to the Local Government Board, England, on this subject are conclusive as to their financial disappointment.

I look with more confidence on a scheme in which all the different branches of the district are collected and discharged at the best outfall can be selected. I do not consider this requirement has been, in the present case, fulfilled; but am certain a direct and permanent injury would accrue if Mr. Leonard's design was ever carried out.

The introduction of a syphon in sewerage is most objectionable, but if necessary it should not only be in duplicate but capable

\* "A Manual of the Historical Development of Art—Pre-historic, Ancient, Classic, Early Christian; with special reference to Architecture, Sculpture, Painting, and Ornamentation." By G. G. Zerfli, Ph.D., F.R.S.L. London: Hardwicke and Bogue.



of being thoroughly cleaned out and examined. A 15 in. pipe, even in duplicate, is a great mistake, and every possible plan should be attempted to avoid any such necessity.

The estimates for the work to be done are rather low, as I find in Mr. Leonard's scheme 9,000 yds. of all kinds of sewers are provided, and this, including syphon pipes in tidal-water, and from some experience in this work, his figures are not at all adequate. Anything now done should be well done or not at all, and if guardians require sanitary improvements effected, the difficulties to be encountered, and the amounts required to perfect the system should be fully set out; and I quite agree with your remarks, "that a practical solution of the drainage difficulty of these districts is much desiderated, but as yet it has not appeared."—Yours,

A CIVIL ENGINEER.

### QUALITIES OF TIMBER.\*

In dealing with this division of our subject we shall receive little assistance from the works of modern authors. One pins his faith upon quick grown timber, another upon that of slow. Professor Balfour, in his "Manual of Botany," says, "The more vigorously the plant grows, the better is the wood produced. Experiments made at the British dockyards proved that those oaks which had formed the thickest zones yielded the best timber. Barlow's experiments at Woolwich showed that a plank of quick grown oak bore a greater weight than a plank of slow grown oak." On the other hand, the author of "English Forests and Forest Trees," speaking of the longevity of the oak, says, "'Soon ripe, soon rotten,' is an adage that holds conspicuously in almost all departments of the organic world."

Quick grown wood is the fruit of the plain, where soil and moisture are abundant. If water is present in too large a degree, the timber is soft and porous, and sheathed in a thick covering of imperfect sapwood; but if its site is upon land elevated above the level of the swamp, it attains perfection, inasmuch as it is large in size, and clean and kind in quality.

Slow grown wood is found in high and dry situations, where its hardness and tenacity are requisites wherewith to do battle with the storm; except that serviceable timber cannot be obtained from trees so situate in the same degree as from those of the plain, it is superior in point of hardness and durability to its more delicate rivals. Individual trees afford but imperfect illustrations of these qualities; but lessons may be learnt by inspecting cargoes of foreign timber. In the instance of mahogany, the large wood is straight, soft, and light, whereas the small and medium sized is crooked, hard, and heavy; the one is the growth of the plain, the other of the hill or mountain side; and whatever the qualities of quick grown oak-wood may be, as pointed out by Professor Balfour, they are not such as render them applicable to the whole range of forest trees.

The above are notes referable to site, and its influence upon the qualities of timber; they show a clear and distinct line of separation; but it is not so marked as to preclude the possibility of assimilation. On the one hand, the lithological character of the ground may be favourable thereto, whilst on the other it may lend countenance to dissimilarity.

In dealing with our subject in detail,—

"The builder oak, sole king of forests all,"

claims priority of notice. In Nottinghamshire, Rutlandshire, and other districts to which the forest growth of England is natural, oaks are found as kind, soft, and light as Memel wainscot; this quality is used as a substitute for the imported oak, and when wrought into cutlery and other cases answers every purpose. For art work it is selected by Mr. Tutbury, the eminent

wood carver of Edwinstowe (Notts); it is known as sand-grown wood, and in such dry light sands as are peculiar to the forest tracts of Sherwood is most abundant. On the ducal land of Hardwick, in the neighbouring county of Derby, we find the ferruginous clays of the coal measures producing a class of oak hard, close, and dense in quality, one wholly unsuitable for ornamental or manufacturing purposes; such is its strong character that it cannot be seasoned in bulk, nor can scantings be obtained from it that will retain their shape for even a few days.

On the score of durability the range is equally great; the Hardwick variety of oak is practically indestructible, whereas the sand-grown is only partially so; but where the latter is grown in association with water it is found so light, soft, and perishable that it scarcely merits the title of "British oak." For ornamental purposes it is useless, but from the ready manner in which it is hewn and wrought bulk it is used by unprincipled persons for ship and boat building. Anecdotes are told of naval surveyors condemning such oak as being Spanish chestnut, but upon being convinced of their error allowing it to pass into work. In practice it is known as chestnut oak, or bastard oak, and its growth has been in ignorance attributed to the *Quercus sessiliflora* species of our native oak. The author of "English Forests and Forest Trees," speaking of the oak, says, "It generally requires sixty or seventy years to attain a considerable size. If placed in suitable soil, a deep sandy loam, where it can send out its huge roots freely, it will go on increasing in size, and know no decay for centuries."

The foregoing remarks, although applied to the oak, are applicable, in a large degree, to other trees; they are penned in reference to English as home-grown wood, but are capable of great expansion when applied to foreign timber.

Taking the most salient kinds with which we of the east coast of England are familiar, the Scotch fir, otherwise the red or yellow deal, is the most conspicuous, and as such claims our special notice. It has been already noted that in Great Britain and the south of Russia it attains a large size, is quick in growth, and secretes resinous matter in a somewhat large degree—the reverse being the case in the more northern districts of Europe.

In detail we make bold to state that there is no good redwood on the continent of Norway; taking the southern ports, which are embraced in the Christiania Fiord, there is nothing stored but small sappy pale-grown wood, the best of which is converted into flooring. Passing further north to Dronheim, the old capital of Norway, we find the wood larger in size; but the deals are short in specification, suggestive of crooked and stunted trees. In regard to quality, no better proof is needed than their acknowledged inability to ship first quality goods. Vefsen, the most northern port from which our timber supplies are drawn, furnishes little proof of change; the wood is less hard and resinous in character, but being subject to black and dead knot, a peculiarity observable in all woods of extreme northern growth, it merits no other title than that of inferior.

It is to the mountainous character of this country, and its exposed position to the open sea, that the cause of its stunted and inferior growth of redwood is traceable.

In Sweden the redwood is generally good; it is quick grown but not large, and except in the extreme north is somewhat hard and resinous. The southern port of Gothenburg, the Liverpool of Sweden, from its extensive inland connection of lakes, rivers, and canals, has a wide range from which its wood supplies are drawn; its great field is the Wernland district, which forms the northern shore of Lake Wener, and from which the best shipments of goods are drawn. As a rule, Gothenburg goods are hard and serviceable; but they vary in quality as much in the hands of the various shippers, as they do from the nature of the land upon which the wood is

grown. It is beside our province to furnish trade marks or brands, suffice it to say that the best shippers furnish goods, little inferior to Soderhamn and Sundswall goods; whereas the worst are scarcely equal to Norwegian goods. As with Gothenburg, so with Malmö, Norköping, Stockholm, and other southern ports, the wood is conveyed easy distances to the mills, hence it is converted one or two seasons after felling. Gefle and Soderhamn, which are illustrations of the best shipping ports in the country, are far removed from the forests supplying logs for their mills; and owing to the rivers being unnavigable the greater part of the year, the logs are exposed to the tempering action of water, a season longer than those of the south. The best logs are drawn from the forests at the feet of the Scandinavian Alps, a range of mountains which mark the separation between Sweden and Norway; they are sheltered in situation, and occupy a favoured district for the full development of timber trees; the stunted wood peculiar to the Norwegian slopes is practically unknown.

So far as the writer, who has travelled in these northern lands, can speak, the rocks are mainly composed of granite, sandstone being very rare; limestone, which is something plentiful, is confined to the eastern coast. The drift, or superficial matter, which forms the levelling material of the valleys, is composed of sand and loam largely intermixed with gravel and fragments of rocks, materials, if not interfered with by bad or obstructed drainage, highly suitable for the growth of fir-wood.

In the more northern parts of Sundswall and the Gulf of Bothnia the wood is smaller in size and somewhat sappier; in point of cleanness it is also inferior; owing to this falling off, the high standard of bracking, peculiar to Gefle and the neighbouring ports, is not maintained, and the lower qualities sink in the same proportion. The wood is here softer, and the knots, which do not pertain to the living branches, are black and dead; whereas in the former case, from secretion being active, they are hard, sound, and bright.

### THE TOMB OF SIR TOBY BUTLER.

IN the IRISH BUILDER for Nov. 15, 1871, we gave a sketch of the Tomb of Sir Toby Butler as it then stood in the old churchyard of St James's parish in this city, and accompanied it with some historical particulars. We also gave a translation of the Latin inscription, which we re-print for the benefit of such of our readers as may not have seen it:—

SIR THEOBALD BUTLER,

An Irish Lawyer,

An honour to the laws, his name, and native country.

Invested, not exalted, with the equestrian dignity,

An Advocate

Judicious, upright, polished, eloquent,

Excelling

In the legal and his native dialect,

Not in partial justice,

Not in search of favours,

Not in flattering language,

But in weight of arguments,

An innate force of genius,

And a consummate knowledge of the laws.

A Man

Whom eloquence, an unsullied faith, gravity, tempered with

much humour and affability,

Whom a sincere and virtuous course of life,

And a mind the guardian of virtue,

Sagacious to unfold the intricacies of the law,

Have raised to the summit of fame,

And had also (were it not for his religion)

Raised him, no doubt, to that of fortune.

He died the 11th of March, MDCCXX.

Inferior only to death.

James his eldest son erects this monument to his

Most worthy Father.

We expressed our regret also that the monument had never received any attention, and suggested that its preservation should be looked to by members of the Irish Bar. It is with pleasure we have to record that this fine monument of a celebrated Irishman has been "restored" at the expense of Captain Augustine Butler, D.L., of Ballyline, County Clare, under the direction of Mr. William Fogerty, F.R.I.B.A. The work was carried out in the most careful manner by Messrs. J. and W. Beckett, builders and contractors, South King-street.

\* From "Chapters on Timber," in *Timber Trades Journal*.



## OLYMPIA.

FROM Olympia there comes news of great interest, and of excellent augury for the future. The excavations, since their resumption at the end of October, have been carried on with increased appliances in the shape of carts, horses, and machinery, but in the face of very unfavourable weather. The plan of the season's work included an extension of the diggings westward of the Temple of Zeus, in search of the boundary wall of the Altis; their continuance on the northern flank of the temple, which had been cleared along one half only (the eastern half) of its length; the excavation of the ground at the western end of the building, and if possible also of the ruins of the Byzantine church built, it is conjectured, on the site of the Heraeum, and described by earlier travellers as existing near the north-west corner of the temple. The extensions towards the boundary of the Altis have thus far yielded a number of inscriptions, but no works of art. Up till the middle of December, the chief discoveries of new sculpture had been three in number, viz., a fragment of drapery in strong motion, found at the west end of the building and conjectured to belong to the pediment group of Alkamenos; and two portions of metope, one a fine male torso, and the other a complete figure of Athene, identical in style and treatment of drapery with the Hesperid of the metope discovered in April last. But the last accounts of all, received in Berlin on December 24, speak of richer finds both in the eastern and the western diggings. Eastward, a new female torso has been found, belonging, apparently, like the majority of last season's discoveries, to the pediment group of Paonios; and westward, better still, a female head, described as of great beauty and in excellent preservation, of which the situation is said to leave no doubt that it belonged to the group of the western pediment. If this is so, then we have the first assured fragment of the composition of Pheidias' greatest pupil, Alkamenos, and we may entertain good hope that others will speedily follow.—*Academy*.

## DAMAGES BY STORM AND FLOODS.

WE can only note a few of the casualties resulting from the storm and high tide on Sunday night.

The Kilmore fishery pier constructed some years ago at considerable expense has been partially demolished.

In Belfast, Corporation-street has suffered much; the cellars and lower apartments of most of the houses have been flooded—planks, chairs, and carts being utilised to enable the inhabitants to reach their dwellings.

At Queenstown great destruction to the shipping in harbour is reported. A cabin near the town was blown down, and its occupant badly injured.

At Youghal the sea rose to an almost unprecedented height, and beat against the line of cliffs and quays with great fury. Communication between the railway station and the town was almost entirely interrupted. Along the strand the sea committed great ravages, and many of the inhabitants of the houses in the low-lying lands about had to fly from them, to escape drowning. An idea of the fearful force with which the sea rushed in may be gathered from the fact that breaches were torn open in the massive concrete sea wall which within the past few years had been created between the Esplanade and the sea.

At Cork the Lee has overflowed its banks, and the low-lying parts of the city are flooded. The poor have suffered greatly by being obliged to fly their dwellings.

From England we get some word of damages experienced.—The Forest of Dean was visited by another great flood on Saturday. At Blakeny people retired to their upper rooms for safety. The traffic on the Avon between Bristol and Bath, where the Kennett

and Avon Canal commences, is completely stopped by the flooded condition of the river.

In London the principal damage has been sustained in the southern districts, where reports of conservatories destroyed, chimney-stacks partly demolished, and other destruction of a like character, were numerous. Some idea of the destruction caused may be gathered from the fact that about thirty persons were attended at the hospitals for injuries sustained in the gale, while at Wandsworth the partial unroofing of a house is expected to have fatal results in the case of a gardener named Smithers, who was buried in the debris. In Percy-street, Hackney, a heavy stack of chimneys was blown down, and the bricks fell through the roof of the back kitchen, which, however, fortunately was not occupied at the time. In Albion-terrace, Peckham-road, near Rye-lane, the parapets of two houses were blown down into the front gardens, carrying with them several feet of the roof, and leaving the bedrooms exposed completely to the weather.

## SANITARY AND OTHER NOTES.

*Maryborough*.—Amended plans having been furnished by Mr. Brett, C.E., for the drainage of this town, the guardians of Mountmellick Union have requested the Local Government Board to recommend the Board of Public Works to advance a loan of £500 in aid of the works.

*Athy*.—A committee, appointed by the guardians of this union, report unfavourably on the sanitary condition of the town. The state of the district known as Mount Hawkins is as bad as can well be imagined. Many cottages have no yards attached, whilst the yards to others are in a filthy condition. There are manure-heaps two or three feet above the floor levels, the liquid from which flows into the rooms. Several cases of typhoid fever have resulted fatally. The committee are of opinion that there has been great negligence, either on the part of the sub-sanitary officer or of the sanitary authorities, in not remedying such a state of things. The committee believe that many other districts of the town are in want of sanitary improvement, and recommend the guardians to exercise the powers entrusted by law to them.

*Naas*.—A question as to the cost of burial of a female pauper who had died in the union, arose at the meeting of the guardians. It appears that she had resided for a number of years at Morristown-Biller, in which division she had died. The chairman decided that the cost was properly chargeable to that division. In reply to the chairman, the relieving-officer stated that the woman lived on the roadside. Mr. Ireland.—Had she a permanent residence in the neighbourhood? R.O.—She lived in a ditch! Chairman.—If she lived under an umbrella, with the handle in the ditch, it would constitute a residence! This was decided by the judges in England.

A guardian of Borrisokane Union has notified his intention of moving the cessation of the salaries of the sanitary officers of the union, on the ground that these officials have performed no duty since their appointment under the new Public Health Act.

## HOME AND FOREIGN NOTES.

*A COSTLY READING-ROOM*.—At a recent ordinary meeting of the Liverpool Town Council, the sum of £5,000 was voted unanimously as supplementary to a previous grant of £18,000, for the purpose of building a public reading-room as an addition to the Free Public Library. The £18,000 originally accorded for this purpose was granted out of the library rate. The £5,000 voted is to be taken out of the surplus borough fund. The £23,000 for the reading-room is supplementary to a public library and reading-room, which has already cost upwards of £120,000. When will Dublin have a free public library?

A new organ has been erected in the parish church, Booterstown, County Dublin. Messrs. Foster and Andrews, of Hull, are the builders. It was opened on the 24th ult.

It is proposed to engage the services of a legal gentleman for the purpose of classifying, arranging, and putting in apple-pie order the leases, &c., &c., in the muniment room, City Hall. It has been stipulated that should the performance of the task occupy more than twelve months the remuneration is to be only 150 guineas.

A stained glass window has been placed in Trinity Church, Limerick, to the memory of the late Mr. William Franklin, manager of the Provincial Bank. The subject depicted is "Christ Healing the Blind." The Blind Asylum is connected with the church, and we understand the deceased gentleman took a deep interest in its affairs.

*AN OGHAM DISCOVERY*.—At the last meeting of the Society of Antiquaries of Scotland, Mr. G. Gouldie read a paper giving an account of the recent discovery of two monumental stones in Scotland, with inscriptions in Ogham characters. Only five such inscriptions are said to be known on the mainland of Scotland, and five are now known in the island groups of Shetland and Orkney.

*A NEW STREET-CLEANSING MACHINE*.—Trial has been made in Bristol of a new machine designed for sweeping and carting the street mud, which is the invention of Mr. George Case, engineer to the Bristol General Hospital. The machine, which is triangular in form, is so constructed as to be readily attached to an ordinary mud-cart. It consists of two revolving brushes of similar dimensions, surmounted by an iron casing. These brushes sweep the dirt up an incline and into a gutter, which is placed crosswise of the machine. The dirt, as it enters this gutter, is carried from right to left by a series of scrapers or elevators attached to an endless chain, almost similar in construction to the elevators used in the mud dredgers. These elevators having drawn all the mud to the extremity of the gutter, force it up a shoot about 4 ft. in height, and the top of which overhangs the mud cart, into which the matter falls, and the elevators pass down the opposite shoot empty and recommence their services.

*THE IRISH LANGUAGE*.—Last year the council of the Royal Irish Academy, following the course adopted in 1873 with respect to the provinces of Munster and Connaught, offered, out of the Cunningham Fund, two premiums of £50 each for the best reports or essays on the present state of the Irish language and literature, written and unwritten, in the provinces of Ulster and Leinster respectively. Though these premiums were extensively advertised, as well in the Dublin as in the provincial newspapers, three essays only were sent in to compete for the premiums. After careful consideration of the essays the council was of opinion that none of them was of a nature to merit the full award of the Academy's prize; but at the same time the council considered the knowledge and industry displayed in the essay by Mr. Francis Keane, 20 Newcomen-avenue, Dublin, sufficient to entitle the author to some substantial mark of consideration, and the council has accordingly awarded a honorary donation of £20 to Mr. Keane, who has deposited his essay in the library of the Academy. We would like to see the essay printed shortly, either in the "Transactions" or separately, as an encouragement to other students.

*"NECESSITY THE MOTHER OF INVENTION."*—A red pocket-handkerchief occasionally, it appears, says the *Commercial Traveller's Gazette*, becomes valuable on railways. At the collision which occurred at Wolverton, on the London and North-Western Railway, a short time since, the red lamps on the trains were smashed and rendered useless. It was known that, in a few minutes, the Scotch express would arrive on the scene of the disaster, and consequently a red light was urgently needed. But the much-needed crimson glass was not forthcoming, and all were at their wits' ends to devise a plan for staying the progress of the flying monster they knew was rapidly advancing. Suddenly somebody produced a red pocket-handkerchief, and said it might perhaps answer the purpose, if placed over a white light. The plan was successful, and the express was brought to a sandstill. Had the Scotchman run into the wreck of the other trains the smash would have been of a most disastrous character. No doubt, after this narrow escape care will be taken in providing a few red lights to long-journey trains besides those which are required for immediate use. It is stated that, to meet cases of emergency where red signals are needed, Great Northern men are all required to wear red neckties.



Illustration.

ANCIENT IRISH CROSSES.

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THE IRISH BUILDER.

VOL. XIX.—No. 410.

HOW SHALL WE BUILD?—WHO SHALL ADVISE?



HE interrogatory that heads this article may well be put, for at present there is no end of "fads" and fancies, Utopias and castles in air. We have

scarcely now time to draw our breath after digesting some new scheme, project, or proposition in the world of architectural art and sanitary science, when another crops up to amuse, amaze, or perhaps to instruct us. The building art is certainly becoming a very enticing and fascinating one, when it has the power of drawing out hitherto latent talents in various fields, from the nobleman who has built a mansion for himself down to the tradesman who has had a new shop-front put in of a nondescript style. Architects had better look to their laurels, for the question may be now ranged thus—"Lawyers and Doctors *v.* Architects and Builders." The two former professions are seemingly ambitious to have their fingers in the architectural pie of the future, though they are nowise desirous that architects or builders should trench upon their professional grounds. A little over a quarter of a century ago—indeed we might say under that time—lawyers and doctors were seldom known to ventilate an opinion upon current building and sanitary questions. If the former touched upon the question at all, it was only in courts of law, carrying out the instructions in his brief; while the latter man of medicine smelt rank treason and heresy in the advice of pioneer sanitarian architects. Transformation scenes have been many and rapid within late years, and hence architects have lately come into contact with strange bedfellows. Misery and misfortune, it is said, brings about this species of acquaintanceship; and we suppose it would not be a remarkable event if, some fine morning, the professional architect found on waking that his sleeping partner had kicked him out of the bed. Architects have, of course, sufficient knowledge of natural history to know how the

cuckoo deposits its eggs in the buildings of other birds, and what is generally the fate of the young of the smaller species. So much by way of preliminary.

Sir Edmund Beckett, Bart., recently published a very useful book in many respects, which we were bound to favourably notice in these pages, for, judged by its merits, it was a commendable performance for a talented legal gentleman. Upwards of a year ago, Dr. Benjamin Richardson, in a paper read at a meeting of the Social Science Association, originated the idea of a Hygeiapolis, or City of Health, to be raised in some favourite locality—a city, in fact, of perfect streets and dwellings, a sanitary abode of health and comfort for all its denizens. The idea was so enticing that some speculators thought they discovered an open for floating a company at once to carry out the realization of the worthy doctor's idea. The "little game" of the would-be speculators was, however, knocked on the head, and the City of Health remains still unbuilt. Again, the active and well-meaning author of "Hygeiapolis" is on his feet, and this time he comes forward with a more startling theory. We think we can see many members of the Royal Institute of British Architects shivering, and with a cold perspiration running a-down their foreheads. Dr. Richardson told his hearers a few days ago in London that all our houses over the British Islands required a pulling down and a re-modelling. We quite agree with him when he says that the absolute essentials of health are: pure air and water, abundance of daylight, freedom from damp, and equable temperature; but these conditions of a healthy dwelling have been pointed out over and over again for years before Dr. Richardson entered the fields of sanitary science, or dreamed of a City of Health. We cannot, however, pull down houses by wholesale over the island, though in many instances they may be remodelled by internal arrangements.

It is the staircases of our ordinary houses that the doctor finds the most fault with, and he goes in boldly for their construction on a different principle. He would place the staircase in a shaft or turret external to the main building, as the staircase in our ordinary buildings serves as a species of shaft for sucking the atmosphere of the kitchen and scullery into the sitting-rooms, and of the sitting-rooms into the bed-rooms, and the whole into a close vault above. Gases generated through the day are caught up through the existence of the staircase, so much so that the sleeper at night revels in them, and is fated to repeat the process for a space of time representing the third of his life. If Dr. Richardson's plan were adopted, he thinks a perfect or nearly perfect dwelling would be the result. The staircase would then be in the rere of the house in a distinct shaft or tower of its own, leading straight from the ground floor to the upper part above the level of the house. Each floor would have a door, and each flat would be independently lighted, warmed, and ventilated.

We shall not notice in detail the various sanitary requisites pointed out by the doctor, for these have been often discussed before, including the water supply, sewer gas, drains, &c. Ideal residences are generally very ornamental, sweet, and exceedingly pretty; but how are these perfect ideals to be embodied into practical ones? All are agreed as to a better plan of house construction in

view of health, but the difficulties must be met in a sensible and thoroughly practical manner. It is in the future planning of our domestic dwellings that improved arrangements must be effected, for cities cannot be turned upside down, and the whole social habits of our people changed, and such a revolution must be witnessed before the doctor's plan of a staircase in a turret at the rere of the house, and a winter garden on the roof becomes possible, however pretty it may look on paper. The mansions of wealthy owners can be built, and many of them are built at present as they have been in the past, in various ways. Men of wealth can play many fantastic tricks with architecture as well as with other arts. Stairs have been and are still constructed outside of houses in front, back, and rere, and internally also. Large mansions, hotels, warehouses, and public buildings have back flights of stairs as well as front ones; and Dr. Richardson is doubtless aware that the experiment has of late years been often tried of having the kitchen and sculleries and other cognate rooms at the tops of houses. This plan would not, however, square well with the doctor's plan of a level asphalte roof, crowned with a large conservatory of glass and iron.

The staircase from the earliest times has been considered one of the most prominent and principal features in a building, and the utmost care was taken to make it ornamental as well as a necessary useful piece of construction. We doubt very much if our people's preconceived ideas on this head will be ever fully set aside. Architects themselves will die hard before the stairs are relegated to occupy a very subordinate position in architectural design and building construction. We ourselves hold that the staircase must always be a prominent ornamental feature in domestic dwellings, and that the end can be obtained and maintained with all the sanitary requirements of a healthy and well-planned dwelling. It is worth while just now to quote the opinions held in the past and in the present on the proper position of the staircase. Palladio writes—"In placing of staircases the utmost care ought to be taken, it being difficult to find a place convenient for them that will not at the same time prejudice the rest of the building." Just so; and so thought other writers of the Palladian school of architecture, though the age in which the older of them had written was not what can be called a sanitary one. The Classic school went in for broad staircases, easy of ascent, handrails rather heavy and moulded, and balusters in keeping. The sides of the stairs had niches for vases and other figures; but many ornamental variations took place according as the construction of the stairs was straight, elliptical, or circular. A small blind staircase in a large house, and a very large staircase in a little house, are errors which ought to be avoided, as often pointed out.

In the mansions of the British Islands, of the Elizabethan period, many of the staircases were made in three flights, at right angles to each other on the three sides of the well-hole. The newels were of great size, handsomely carved like some of the open-timber roofs, and these newels were placed at each turn or angle of staircase or flight, the handrail being framed into the newels. The continuous handrail, ever and anon improving, with its fancy geometrical "wreath" or twist during the last eighty or



a hundred years, pushed the old newel staircase with its handrail, ramps, and swan-necks into the shade. Of late, however, the newel is again coming into fashion, and displacing the scroll for the starting point of the handrail. As a starting point, the newel occupies less space than the scroll, and in American practice the newel is almost universal. The newel is susceptible to not a little ornamentation in itself, in octagon form, sunk panelling, moulding or carving thereon, and in capping. At the returns of the flights of the stairs, of course the wreath or twist is still maintained in timber stairs generally.

Sir Edmund Beckett, of course, had his say, in his recent "Book on Building," on staircases, and here is what our English baronet and Parliamentary Counsel writes:—

"Some people have a notion that two successive flights of steps should not be put against a wall in a long hall, and I was told they would not look well. The notion is absurd, and such a staircase may be and is now admitted to be very handsome. The first flight should always be longest, and looks better closed in under the steps; and the second also, if they are on the same wall. This makes convenient places for closets, which may open either in front or on the other side of the wall; and also a good place for a door under the landing to the back passage, as the door will be a good deal screened. I need hardly say that a large staircase should turn its face and not its back to the entrance, unless there is some strong reason for turning it the other way. Winding stairs, even of the grandest sweep, and all the more so if they have a narrow 'well,' are both uncomfortable and dangerous, though sometimes inevitable. And they are generally made worse by having no rail on the outside, where the steps are widest and easiest. The consequence is that people taking hold of the rail are driven to the narrow end of the steps, which is practically much steeper than the other end or than the middle, and so these grand-looking stairs are no easier than a common back staircase with the narrowest possible tread."

The worthy baronet is quite right in what he has said of winding stairs, and he certainly must have made friends with some genial old "chip" or staircase-hand in "squaring" matters so well in a "winding" direction.

Sir Edmund Beckett, who is thoroughly "up" in the mechanism of chimes and turret clocks, and who has ascended many a winding turret stairs, has not in his book hinted at anything approaching the construction of stairs for domestic dwellings in turrets at their rare, so Dr. Richardson's plan is his own in one respect.

With another extract *re* staircases from a recently-published book by a professional architect, "The Choice of a Dwelling," we will bring our remarks to a close. Mr. Gervase Wheeler, in the work alluded to, writes:—

"The staircase should never seem to lead directly from the front door; in even the smallest house it may be screened by an inner partition, and in all the plans the ascending flights may be placed upon the sheltered side, so that on coming in the direct communication with the upper floor may not be seen. . . . The direct line of ascent of a long stairway should be broken to secure ease; one continuous flight is tiresome. There should, however, be harmony of arrangement in the breaks; nothing is more perplexing and unsatisfactory than an occasional single step after continuous flights of longer or shorter intervals. . . . In practice an oval staircase is tiresome, that is, if continuous; for the body gets accustomed to the long sweep of the centre of the flight, and is embarrassed by the shorter radius at the turns; whereas in a straight flight, even with windows at the turn, the change of motion is so abrupt that the limbs adapt it at once, whilst in the former case the changes in the curve causes embarrassment; in other words, a straight line ending in a curve is more easy to follow than consecutive curves of different degree. . . . The lighting of a staircase should be obtained in such a manner as to be free from the glare of the direct rays of the sun; it should never be carried across an exposed window,

nor should it depend upon a borrowed light, which the necessity of internal re-arrangements might at any time destroy. . . . The best form of upper light is one by which a small aperture at the top comes in immediate contact with the direct external rays, and the sides are closed as transmitters of light, but capable of being open for the free passage of currents of air for ventilation. If, owing to the height from within to the surface of the roof, a glass ceiling is necessary, it should not be flat, but with cores or sides at an angle, and with perforations therein; the central position will receive and transmit the direct rays of light, and the openings permit the escape of heated air, and the passing in of the fresh external atmosphere. The principal staircase should be separated by a lobby with enclosing doors from the back stairway and kitchen passages; and this should have, if possible, an external window upon the open level. This will go far to prevent the escape of odours from the kitchen into the hall, and their permeation of the staircase."

We have now given the views of the fathers of architectural literature, and also their professional posterity, on the subject of the staircase, and the position that it holds, or should hold, in our domestic buildings. We have given the opinions also of intelligent and talented lawyers and doctors. Will the designs and plans of the latter be in future accepted by their clients and patients intending to build, with the same confidence as their law and physic, or will professional architects have any chance at all of competing or holding their heads above water? We do not ask the question in irony, for in view of all the Utopias by which we are threatened and surrounded, we are beginning to have a misgiving as to our own entity, and to think that architects are only myths after all, and that everybody has become, or is fastly becoming, his own everything—nurse, tutor, priest, lawyer, doctor, architect, builder, and craftsman. A City of Health is desirable, and we hope we may live to see it; but, with a city of amateur cooks, no man's broth would be safe if there be any truth at all in the proverb.

#### ANCIENT IRISH CROSSES.

THE crosses represented on the accompanying sheet exhibit specimens of a class to be met with in great number throughout this island. Although rude in workmanship, they are often of interesting design, and always form very striking and picturesque features in the old country graveyards or by the wayside. They are, of course, not to be compared with any of those beautiful Celtic crosses such as Monasterboice and Tuam, but they are, no doubt, worthy of attention from their variety and number.

At Tulla, Co. Dublin, are two crosses: the first stands in a lane on an eminence, and forms a prominent feature in the landscape; the second is in a field close by, and is of a very peculiar design; it has been taken from its base and stuck in the ground, so that if dug out and placed in its former position it might be as high as the other cross; another base lies near, but there are no signs of a third cross. A curious mark incised on all the bases is given in my sketch.

At Stepside, in the centre of a lane there, is a very curious small cross, guarding a holy well, long since dry; and about half a mile further, at Kilgobbin, between the churchyard the castle, there is another very high one, with slight traces of a crucifixion having been carved on it.

At Finglas there is a fine granite cross; formerly there was visible only the base and a portion of the shaft, when some years ago the rest was discovered and it was skilfully

repaired. It has a somewhat heavy appearance from its not being pierced, while it looks as if such was intended to have been done.

The small mutilated cross at Kill-o'-the-Grango bears some very slight traces of carving on its lower part, and is mounted on a huge base singularly out of proportion to it.

At Kiltuc, near Old Connaught Avenue, Bray, there are two old crosses; they were both lying on the grass at the time that I saw them, with a number of details that looked promising at a distance, but proved on a closer examination to be Classic. If they belonged to the church I should say there were rather early specimens of that revival, as the church and graveyard have been desecrated from time immemorial. I and a friend with me lifted the cross into its base. It is a wonder that the gentleman in whose demesne it is would not get it fixed into that position.

The cross near Bray is in very good preservation, and is of curious form. There is a small fifteenth century font lying near, which some careful person has lately had fixed on a stone pedestal in the field behind. Some antiquaries, misled, no doubt, by the rudeness and barbarity of their design, seem to have assigned a greater age to these crosses than they are entitled to. Ledwich has no hesitation in calling the great cross at Tulla an "Odin cross." Perhaps some of your readers may be able to throw light on the subject.

G. W. M.

#### "PLUMBING."\*

(Continued from page 350, vol. xviii.)

"THE plumber having put up his iron gutters," according to Mr. Buchan "we now come (in chapter iv.) to treat of roofs where the material used by the plumber is lead;" from which it must be inferred, of course, that such a plumber is one of those sapient Jack-of-all-trades whose advertisements we sometimes see—plumber, spouter, painter and glazier and paper-hanger, gas-fitter, bell-hanger, zinc worker, and tin smith, all embodied in the one individual. But even such an one, unless he were a very dunder-headed Jerry jobber, would scorn to take Mr. B.'s mode of putting up a gutter 48 ft. long with soldered joints. We are informed "where the joint is soldered it both looks neater and forms no obstacle to the water running off freely." Our master-plumber does not take into account the inevitable expansion which, of a hot summer day (amounting to about 3 in.), would buckle up the lead gutter, and disarrange it for its duties on the next rainy day; neither is the contraction of lead allowed for, which of a frosty night would pull the ends of the cornice gutter so described from under the flashing, &c. We are happily free in Ireland from such an arrangement of cornice as would necessitate this ignorant mode of doing work, though we cannot claim exemption from a vast deal of bad plumber's work at the hands of the jobbing tradesman. We have too much respect for the competency of the Glasgow architects to believe that any one of them would design such a cornice, or specify such a soldered gutter. Our idea is that some of the tag-rag and bobtail of the profession, and not a real architect, has designed this "sowthered" gutter; for Mr. B. has elsewhere vouched for the fact that "miles upon miles of such and similar work are put on all around the little cabin from which he writes" (*vide Building News*, vol. xxii., page 122). Doubtless this *sanctum sanctorum* of the "mysterious craft" is in

\* "Plumbing: a Text-book to the Practice of the Art or Craft of the Plumber; with Supplementary Chapters upon House Drainage, embodying the Latest Improvements." By William Paton Buchan. London: Crosby Lockwood and Co.



the neighbourhood of the house illustrated in fig. 36, and, like it, a curiosity quite devoid of architectural pretension.

If we turn over to page 55, we are regaled with "cauld-kail-het-again" in a hole-and-corner of a chapter on zinc-covered flats. The author as usual sits on the architectural man, and then gives us, in the wrong spirit and wrong place, alternative arrangements for laying "the gutter," reminding us of his fellow-countryman—

"Setting my staff wi' a my skill,  
To keep me sicker;  
Tho' leeward whyles, against my will  
I took a bicker."

Respecting figures 29 and 30, we notice they are at variance with the letter-press, and we look in vain for the "doubling" so graphically described on page 19. This page gives us some good practical information, and an apprentice plumber can get along smoothly until he turns over the leaf, when he is instantly tripped up by his *sine quâ non*, this is a mild sample of the hybrid terminology by which our tradesman apes the scientist, a practice which may be termed vicious when introduced into workmen's manuals, but which has no parallel in the entire of Weale's Series, and crops up to offend us only in this volume, 191.

We will have pleasure and confidence in recommending this clever tradesman's "go with me," "plumber's God-send," or whatever else he may choose to call it, when he re-arranges and re-writes it out of its present confusions up to chapter xiv. When he substitutes correct diagrams for those borrowed from the *Building News*, if he is bent upon being all-comprehensive, he may make arrangements with Messrs. Braby to bind up along with his lucubrations on "plumbing," their book on Zinc Work, but let this be, as Mr. B. would say, "Zinc Work *per se*," and not as the present hodge-podge. To make the book serviceable, he will also have to complete his now incomprehensive index. And in certain instances he will have to allow to his lead work the same latitude which he doubtless intends when, in page 66, he instructs us "to allow zinc plenty of play"—"plenty of play in the laps." All that either zinc or lead work require is the room, for they, like Mr. Buchan's literary genius, will exercise their playful functions at their own sweet will.

Chapter xiv. introduces us to a separate section of the plumber's craft: "Waste-pipes and Soil-pipes," and here for the first time we consider our author is in his own element, and writing like a master of his trade, who is also master of his subject. If we remember aright, it was in the arena of the soil-pipe he won his spurs in the good old days of his connection with the *Building News*, and on this subject he may well be allowed to speak for himself, viz:—

"We now approach a branch of our subject which is closely connected with one of the great questions or problems of the day, to wit the sanitary question. The problem to be solved here is:—How can we retain the use of our conveniences, such as kitchen sinks, baths, fixed wash-hand-basins and water-closets, within our houses, and at the same time the health of the occupants not suffer? In the following pages it shall be our endeavour to throw a little light upon this subject, and if what is said be in accordance with true sanitary laws or policy, we trust that architects, plumbers, and others interested will see that the work is *practically* carried out as suggested. If better plans are brought forward, very good, carry them out, only let 'scampering' in this matter be everywhere denounced.

In many cases the waste or discharge-pipes from sinks, baths, &c., and the soil-pipes from water-closets, are either altogether fixed up inside the building, or, at least, have branches carried forward more or less into the interior; it is necessary, therefore, that they be fitted up in such a manner as, while allowing free passage to the soil, &c., to also prevent any foul air from them, or from the drains into which they are led, getting access to the interior of the house. In order to work well it ought to be observed that the pipes are large enough, strong enough, securely fixed, properly jointed, properly trapped, and well ventilated. To give soil-pipes fair play they ought to be, at least, 4½ in. in diameter internally. This size of pipe allows of a large rush of

water and soil through it without filling it up, which, therefore, prevents the said rush from interfering with the water lying in the various syphon traps. Where several water-closets and baths, &c., are led into one soil-pipe the diameter of main soil-pipe may with advantage be 5 in. or 6 in., the branches being less. Where the water-closets are situated just inside the back wall of the house a common 4½ in. cast-iron pipe is sometimes put up on the outside of the wall with branches coming into it. One plan often adopted in regard to these branches is to have the branch pointing into the wall, as per *u*, fig. 152, into which the branch pipe *v* is led; but this, although it may save a little pipe, often proves a dangerous plan for the health of the inmates, as when the slip-joint at *u*, fig. 152, begins to get slack, or is, perhaps, left slack, and allows the foul air to get out, this foul air, unless the hole in the wall around *v* is solidly and securely built up, finds its way along the outside of *v* into the house. To prevent this, instead of making the hole for the branch-pipe immediately behind the main soil-pipe, make it a little to one side, and put a bend on the branch pipe coming out through the wall, as per fig. 153. In this latter case, although the slip-joint should be slack, it is outside the wall, and the hole in the wall at the bend *w*, can be easily made good.

These remarks about figs. 152 and 153 are also equally applicable to the waste-pipes of kitchen sinks, when these sinks are put up inside flatted houses. In slipping in these branch pipes the plumber ought always to see that they are not slipped in too far. I have seen many instances in which this has been the case, and a chokeage caused thereby. These slip joints outside may be made with good red-lead putty. Although this is a cheap style of doing the work, yet if fairly executed it does well enough, only do not neglect to ventilate the pipe at the top. One disadvantage, however, of either soil-pipes or waste-pipes put up outside the building, is their liability to being frozen up in frosty weather, and so preventing the proper use of the water-closets and sinks, &c., or, if they are used, causing the property to be flooded. In such circumstances the branch being put in as per fig. 153 is found to be of great service, as by cutting a slit in the top of the portion of the lead bend *w*, fig. 153, which is outside the wall, the water may be allowed to run off at this slit, and so prevent damage inside.

When soil-pipes and waste-pipes are put up *inside* the house, great care should be taken that they are properly fitted up and securely jointed. If the main upright pipe is of cast iron then it ought, for a good job, to be heavier and stronger than the ordinary iron rain-water pipe. The iron in the latter may only be about one-eighth of an inch thick, but about double that thickness, or more, ought to be used for the former. The vertical joints may be made with red-lead and hemp, or more firmly still by running in the joints with melted lead and then bating them.

If any slip-joints are made where the lead branch pipe joins the iron, the joint should not only be made with red-lead and hemp packed in firmly, but it ought also to be either lapped or a good elastic india-rubber band 3 in. or 4 in. broad (i.e. a piece of large india-rubber pipe about 4 in. in diameter and 4 in. long) put over it.

Where hot water is used another plan is to have flanged iron branches, as per *x*, fig. 154, a corresponding lead flange being made and soldered to the lead pipe, as per *y*, fig. 154, after which the two flanges are red-lead and packed, and then firmly bolted together with four iron bolts and nuts, as shown, an iron ring or 'washer' being used at the back of the lead flange to strengthen it. In fitting up these heavy iron pipes, and, indeed, all soil-pipes and waste-pipes inside a house, it must be seen that, as stated above, they are *securely fixed*. When this is not done the fact of having them large enough, strong enough, properly trapped, and well ventilated is, after the lapse of a little time, quite useless in preventing the escape of sewage gas into the house, as when the pipe is not securely fixed it by-and-by slips down, and the syphon-trap, instead of being properly locked, as shown at *z*, fig. 154, is dragged down at its outlet until it assumes the position shown at *a*, fig. 155, and so becomes quite useless.

I have seen many examples of this, especially in connection with the syphon-traps of kitchen sinks. In order to prevent these heavy iron pipes from slipping down, a good plan is to have a strong iron heel cast on to and along with the lower length or 'hoof,' as per *b*, fig. 156, which heel must be set firmly upon a solidly-laid block of stone, so that there may be no chance of the iron pipe sinking.

If the pipe goes up against the wall it ought to be well hold-fastened also; but if a raglet or recess has been left in the wall for it, or if it goes up in a corner, then, instead of the holdfast, a strong block of wood about 3 in. or 4 in. thick, and about 18 in. or so long, and 10 in. or 12 in. broad, as the case may be,

with a round hole cut in it large enough to allow the pipe to be slipped down through it, should be got and set into space, and rest cut for it in the wall, as per *c*, fig. 156, the pipe resting upon its faucit as shown. When, however, the length of iron pipe has flanged branch upon it, as per *x*, fig. 154, then, instead of resting upon its faucit, as shown at *d*, fig. 156, it is supported as shown at *e*, fig. 154; a pair of strong malleable iron clamps, fig. 157, being put on, and screwed up so as to grasp the pipe firmly, and at the same time be allowed to rest upon the wooden block.

Instead of the wooden block a malleable iron plate about 1 in. thick or so, with a hole cut in its centre to fit the pipe, may be used. The length and breadth of this plate must, of course, be regulated according to its site. In many cases about 18 in. X 10 in. may do for a 4½-in. iron pipe, or with thicker plate less breadth will serve.

The slipped joints of these pipes, as at *r*, fig. 154, may, as we have said above, be made with red-lead and hemp; or stronger still, by stuffing joint partly with hemp and then running in lead; some, again, make rust joints. Whatever plan is adopted, the great point is to see both that it is well done, and that it also thoroughly answers the purpose. These strong iron pipes have been largely used of late for the main upright soil-pipe in many houses, especially where hot water is used, and I consider it quite right to do so. As lead pipes, however, are still largely used, not only for the branches but also for the main upright pipes, we must now refer to the way in which they are fitted up.

Lead soil-pipes should not be made of lead less than 6 lbs. per square foot at the very least, while 7 lb. lead, or heavier, is used for good work. These often require repairs and renewal from three causes: from being put up of too light lead at first, from being too slimly fixed up, and from corrosion, the latter being often in great measure owing to the want of proper ventilation. We cannot do with lead as with iron, for where, as in fig. 156, the heeled hoof *b*, if solidly fixed and not afterwards interfered with, may almost of itself be trusted to support a high superincumbent stalk of iron pipe above it, yet such could not be done with lead, the material being too soft; its own weight would crush it. To obviate this an upright lead soil-pipe must be well supported all up its entire length, every few feet being supported, as it were, independently of the rest."

Now we approve of the details as specified in this chapter for dwelling-houses which are a few degrees above the labourers' or artisans' dwellings, for which latter class of building the less apparatus or lead work the better. But we approve of the general and particular principles laid down in order to a correct architectural hygiene for all classes of buildings, whether for rich or poor; let these principles be applied (as they lately have been in the columns of this journal), as well to the "glazed earthenware sewer-pipe" with "unapparatused privies grouping around it" as to the scientifically apparatused lead soil pipe. Until someone shows us a material for the sanitary ducts of the better class of dwelling houses superior to lead (and lead amalgam where Vartry water is introduced), we will retain lead in our service, and treat it in the best way we can, and make the most of it, fully alive to the numerous objections to its use which can be raised, but confident that as yet no efficient substitute has been found for it.

Returning to our *Vade-mecum* in this chapter xiv., the wood-cuts again land us on a discrepancy, and we vainly search in the diagram 159 for the syphon trap at *o*; similarly in fig. 172 the service box in the vertical sketch is of little service in enabling us to follow the accompanying remarks.

Mr. Buchan's chapter on w.c.s., although very good as far as it goes, is very meagre, and is as usual wretchedly illustrated. The Bramah Closet is, in his opinion, one of the best extant; he omits, or does not appear to have made acquaintance with, several descriptions of w.c. apparatus in extensive use, some of which are improvements on the Bramah Valve Closet—notably Underhay's Regulator Valve Closet, or Forrest's Non-effluxum Closet. We also have unnoticed Underhay's Regulator Pan Closet, which is now the most popular pan closet in the trade, and extensively patronized in architect's specifications. By the use of Underhay's brass regulators, we are enabled to flush any



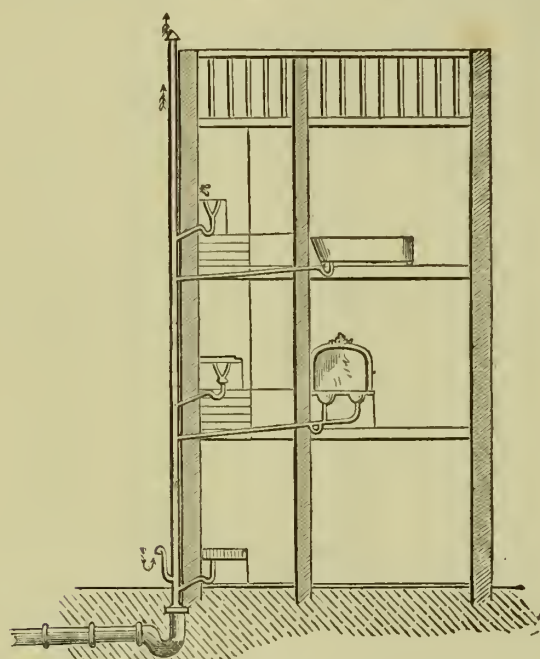
number of the w.c.s. direct from the main cistern, without the intervention of service boxes, cranks, wires or any odds and ends requiring repair. We infer from page 167 that Mr. B. has never seen these ingenious regulators; he inveighs bitterly against the waste-preventing apparatus of those "southern" bodies, Messrs. Taylor and Sons, and Lambert and Sons, of London, and then clannishly enough introduces some brother Scots "frac Glasgao"; but it is within our knowledge that Glasgow is not the place to seek for good plumbers' brasswork. The author properly declines to "enumerate all the different styles of w.c.s." We would not wish to impose such a task upon him, yet we would value his opinion as a practical man respecting a few of the leading patterns of w.c. apparatus in the trade. He might have "let himself out" on such a subject; strange that he has not, and that he is so parsimonious of his goodness in his descriptions of those few which he brings before our notice; insomuch as to leave a suspicion on our mind that he is often but groping his own way in the matter.

candidly acknowledged, however, to be expensive, and in some situations not capable of being properly applied; but where it can be brought into operation, it will, we believe, merit the term "perfect" applied to it. It offers also facilities for the application of grease traps to the waste pipes of scullery sinks or jaw boxes; the necessity of which in large households was urged by Messrs. Hayward and Seddon, at the conclusion of Mr. Lanyon's paper read before the recent meeting of the Royal Institute of British Architects:—

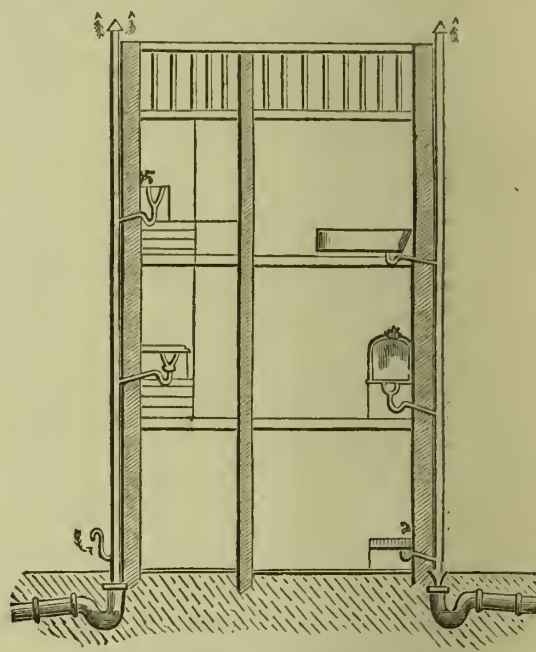
"In order to obtain the perfection of sanitary arrangement, the soil-pipe of the water-closet must be carried full-bore to such a height and position that a blow-down in any wind or weather shall be impossible. Revolving-cowls have been tried to effect the same purpose, but they are only useful while in order. After a year or so these cowls become fixed; and remaining fixed with their open mouths possibly directed towards the wind instead of from it, cause a powerful down-draught, and drive the foul gases into the house, a probability which those who recommend the cowl have quite overlooked. Supposing, however, a position where the soil-pipe,  $4\frac{1}{2}$  in. in diameter, is carried to a

cisterns, and washing-troughs into the soil-pipes, provided that each be properly trapped, for the suction being always outwards and towards the soil-pipes, no gas will enter the house. (See Illustration.) Nevertheless, as hot and soapy water is constantly discharged from the bath and troughs, we are in favour of a separate pipe for them, and its disconnection from drain, even where the thorough circulation system of soil-pipes is most perfectly developed. (See Illustration.)

In all instances where scullery-sinks discharge direct into drains, there lurks the danger of the traps being badly made or carelessly fixed, thus becoming mere delusions, lulling suspicions, and producing deadly results. The faintest odour of sulphuretted hydrogen or sewer-gas proves that the sanitary arrangements are defective. It frequently escapes near stone sinks in sculleries, and sometimes may be detected throughout the basement of dwellings, rendering the underground rooms dangerous to health. In such cases, a piece of paper, steeped in saturated solution of sugar of lead, becomes black if held over the defective trap or vent whence the odour emanates. All danger of this evil is effectually avoided, by adopting either of the two courses we suggest—breaking connection with drains, or thorough ventilation of soil-pipes."



Improved thorough ventilated system, with trapped drain.



Improved perfect thorough ventilated and separate system, with trapped drains.

If we intend to follow Mr. B. out in his sensible but erratic remarks on this part of his subject, we will have to jump from chapter xv. to chapter xxvii. This and the subsequent chapters are most of them worthy of careful reading, but they are so verbose and egotistic as to be at times very confusing, and leading to the belief that he is but making use of Weale's Series to blow the trumpet of the master plumber in Renfrew-street, Glasgow.

We recommend any one who seeks for a pithy digest of desirable sanitary arrangements for the dwelling, to peruse an illustrated pamphlet on the subject issued by Messrs. Maguire and Son, of Dawson-street, Dublin. We have in it presented the following systems:—No. 1. Common system found in most old houses; very dangerous. No. 2. Partially improved system, with outside soil pipe and  $\frac{3}{4}$  in. ventilation pipe. No. 3. Improved thorough ventilated system, with trapped drain. No. 4. Improved perfect thorough ventilated and separate system, with trapped drains.

Now all these four plans or sections are fully and completely explained, yet so tersely and graphically put before us, that in a very short time any one can master the details. We are not in the least interested on behalf of the firm who issue this brochure, the merits of which solely cause us to make these comments, and induce us to venture an extract *in re* System No. 4, which, we may remark, is a step in advance of Buchan;

height, free from all risk of down-draught, the soil-pipe being outside the house if at all possible, assuming also that the proper dip-trap is fixed on the drain just outside, it only remains, in order to supply a constant current of fresh air through the soil-pipe, to connect a 2 in. diameter pipe from the outer air, in a straight line, without traps or dips, to the bottom of the soil-pipe; and this being done, a current of fresh air will enter continuously, and pass up through the soil-pipe, escaping at the high point where soil-pipe is left open to the air. (See Illustration.) This draught of air keeps the soil-pipe fresh throughout.

A very perfect but expensive system, which has been carried out under our suggestion, is that of having two distinct drains, discharging at separate points into a stream, one being for water-closet soil-pipes and foul water, and the other for clean water, overflows, wastes of baths, and washing-troughs. The same attention to ventilation and trapping being observed with equal care.

The water-closet and housemaid's slop-sinks might almost be discharged without any traps into a soil-pipe thus arranged, for the suction will be always from them towards the soil-pipe; but we strongly recommend the traps to be retained, not only for additional security, but also to prevent the transmission of sounds, which would undoubtedly occur without them.

We do not here seek to answer any of the objections that may appear on the first glance at this system, for the simple reason, that in practice the system is perfect wherever it can be properly applied. There are, however, many positions where it can not be properly applied, and then we recommend the simpler system first explained.

In the thorough ventilation system, it is quite safe to turn all the wastes and overflows of baths

#### BOOKS RECEIVED.

*Practical Dictionary of Mechanics.* By Edward H. Knight, Civil and Mechanical Engineer, U. S. London: Cassell, Petter, and Galpin.

This work, the first part of which has been received from the publishers, is certain to be produced in the same first-rate style for which this firm has now a world-wide reputation. It will give "a full and practical description of machines, tools, instruments; chemical and mechanical processes; civil, mechanical, railway, hydraulic, and military engineering; a history of inventions; general technological vocabulary and digest of mechanical appliances in science and the industrial and fine arts. It will contain about 6,000 illustrations, and treat on some 20,000 subjects. It has not been announced in how many parts this valuable work will be completed.

*Cracroft's Trustees Guide: a Synopsis of the Ordinary Powers of Trustees in regard to Investments; and a Digest of Reported Decisions since 1743.* London: Edward Stanford, pp. 280.

Amongst our readers there are, doubtless, some who are favoured with the care of money the property of others as trustees. To such this, the 12th edition of Cracroft's Guide, will be valuable; it will show in what securities trust funds may be safely and legally invested.



FAMILIAR CHAPTERS UPON  
SCIENCE.\*

(Continued from page 342, vol. xviii.)

## NO. II.—THE ANTIQUITY OF THE EARTH.

*Comparatively recent Creation of Man—Opinions of Grecian Writers—Time required for the Formation of Stratified Rocks—Age of Coal Deposits—Erosion of the Falls of Niagara.*

THE age of this earth is a subject which, from the earliest periods of civilization, has been a mystery to mankind. From Egyptian teachings to those of Pythagoras, Aristotle, Strabo, and Pliny, down to our own time, it is still a puzzle, and will so continue for ever. Ages ago, and even until a recent period, both the Jew and the Christian have considered enquiries of this description as rank impiety; but modern intellectual development has dissolved these erroneous ideas, and with them their prejudices—only to confirm us the more fully that science and revealed truths are in perfect harmony with each other. We have cumulative evidences written in the most indelible type by the Author of our being in the fossil remains found embedded in the older rocks, that man's existence is but as yesterday in comparison with them; and we have further the direct testimony that no traces of man or his works are found elsewhere than in the alluvial and diluvial deposits, which are proven to a certainty to have been formed since he became a denizen upon this earth. No signs whatever of him are discoverable in the most recent depositions of the limestone, sandstone, or slate rocks; therefore, that the age of the earth dates back for incalculable periods before man was called into being, is now acknowledged as uncontroverted fact.

The views of the ancient philosophers, although not going the length of modern geological teaching, recognise several destructions of the earth's surface, previous to the creation of man; they consider it was subjected to repeated changes, which, as we infer from their writings, were of periodical or gradual character; and they lead us to imagine that they believed the present agencies operating in nature as sufficient to produce, without total annihilation of the animal and vegetable kingdom, the numerous alterations in the disposition of land and water, which are palpably shewn as occurring at very many former periods of its history. However this may be, they are sufficiently near to indicate they agreed in general terms with the theory advanced by modern science.

By far the larger proportion of the material which constitutes the surface of the earth is composed of deposited layers called strata, and known to have been produced under water, because many of them are but accumulations of both marine and fresh-water shells, upon a scale so vast that the bare idea of computing the time such deposits would be formed in is not within the reach of human knowledge. Each of these layers is comparatively thin, and heaped upon each other according to the time of their deposition. Sometimes we find streams of lava which have flowed over rocks of older date, but to be again covered by similar deposits, as described above. Were it in our power to calculate the time necessary to form one layer of these stratified rocks, and when we know these layers are innumerable, it is evident that it is more than the mind of man will ever arrive at to fix the period of elapsed time since this earth was first launched into space by its Creator.

Again, we have coal; and to the inhabitants of these islands it is one of the most familiar products of nature, but amongst the millions who behold it in constant use, few enquire how it has been produced. Coal, then, is a series of beds of entirely vegetable growth, which have accumulated for ages under a high temperature in swamps and morasses, and most likely becoming beds of lacustrine formation. Deposits of shale and sandstone were formed over them; being upraised by volcanic action, they became chomically

altered, and mineralized in their present form. This process was again and again repeated, until the thickness of many coal fields average from 50 ft. to 60 ft., varying in their seams from a few inches in depth to 6 ft., alternating often with double the quantity of sandstone and shale in intermediate beds. That this is its origin is abundantly proved by the numerous remains and impressions of plants found in connexion with it, shewing their traces of organization still perfectly distinguishable. It is remarkable that ferns most predominate, from the tree fern of tropical regions to the most diminutive specimen of the tribe; but this is accounted for by the fact that their fibres and tissues are much less easily decomposed in water and in damp than those of all other plants. The great body of a coal seam may, therefore, be composed of other vegetable matter, but which has not been preserved in its original form, as the ferns are; and it sometimes occurs whole forests are found with their stems standing perpendicular, and their roots still embedded in their native soil,\* as in the coal mines of Bohemia. There is no product on the face of this earth which leads the mind farther back into immeasurable time than coal fields do. Its formations are probably anterior to the existence of animal life, the fossil remains of which are preserved in our earliest strata, and may be coeval with the primary flora of the earth.

The lapse of countless ages can alone explain such phenomena, but there are many who, not doubting for an instant that the Great Creator of the Universe has existed from eternity, yet reject the theory thus given of the age of the earth, limiting it to the short annals accessible to the human race; but it is to be borne in mind that revelation was given not to inculcate physical science, but to teach man the wondrous works of God, and the immortality he was destined for. It is superstition not religion which causes the non-belief of these evidences which the Almighty has so plainly written in the book of Nature, and which He allows man to avail himself of upon this earth in order to teach His unbounded power, and make manifest His existence from all eternity.

In conclusion of this chapter we will refer to a data given by the first authority of our day, and which, to some extent, affords an idea of the age of the earth. In the fossils embedded in its earlier strata, the bones of the Mastodon,† the great prototype of the elephant, frequently occur; and Sir Charles Lyell, in his recent edition of "The Antiquity of Man," and extracted from his travels in America, referring to the remains of one discovered in the former bed of the St. Lawrence River, Falls of Niagara, thus writes:—"But in the case of the valley of the Niagara we happen to have a measure of time which is wanting in other localities—namely, the test afforded by the recession of the Falls—an operation still in progress, by which the deep ravine of the Niagara, seven miles long between Queenstown and Goat Island, has been hollowed out. This ravine is not only post glacial, but also posterior in date to the fluvial and Mastodon-bearing beds. The individual, therefore, found fossil near Goat

Island flourished before the gradual excavation of the deep and long chasm, and we must reckon its antiquity not by thousands, but by tens of thousands of years, if I have correctly estimated the minimum of time required for the erosion of that great ravine."

The earth had already undergone many and long periods of geological changes before the Mastodon first appeared upon it; therefore, the opinion of the eminent authority we have given ought to bring to every thinking mind the overwhelming conviction of its vast antiquity, which many calculate not by tens of thousands, but by\* hundreds of thousands of years. However this may be, we cannot but feel assured, from the imprint of its own unerring records, that it has existed for almost indefinite time, during which it was repeatedly destroyed and its surface as often revived; and we must believe, when man's appointed time is fulfilled, another destruction will most assuredly follow, when—

"The cloud-capt towers, the gorgeous palaces,  
The solemn temples, the great globe itself—  
Yea, all that it inherits, shall dissolve,  
And, like an unsubstantial pageant faded,  
Leave not a rack behind."

But probably not as Shakespeare implies will it be annihilated, as all our experiences of its past history teach the contrary. Man and his works will necessarily be entombed together with the "fauna and flora" of his age; but, if we are to trust in the permanency of the laws which to our times have governed the globe, it is not too much to imagine that, after a period of repose, a new flora will clothe the earth, and that new races of organic life will be created, to be presided over by beings of far higher order than man in all his pride and power of intellectual development can ever boast of.

## AIR AND DISEASE.†

ROBERT Boyle, one of England's greatest philosophers, termed the atmosphere "the most heterogeneous body in nature." It is the grand reservoir into which are poured all the vapours, all the gases that arise from the face of the earth, from city, town, or country. There is scarcely any emanation from the globe that is not ultimately carried into this "catholic receptacle." There is a constant interchange going on between the earth and its invisible envelope. The result of all this is that the air is necessarily charged with many adventitious substances; and yet owing to the vastness of its extent, and its power of diffusing gases and vapours throughout its area, and also owing, as we shall presently see, to its power of altering the nature of what is poured into it, it really has a most wonderful uniformity of composition. Many of the substances that pass into it are to be found only in very minute quantities even in the immediate neighbourhood of their source; and, on the other hand, the air collected in mid-ocean or over the unsullied snows of Mont Blanc can be shown, by the delicate processes of modern chemistry, to contain traces of these substances. The air is, in fact, in great measure self-purifying. In the great laboratory of the sky, chemical and electrical operations are constantly going on on the grandest scale; the heated air rises, cooler currents rush in to supply its place; breezes, winds, and storms arise and act as agents that move on any gases and vapours or any product of putrefaction, and mix them up in the vast depths of the aerial sea, and there they are not only diluted, but converted into harmless substances. We know but little of "the balancings of the clouds," but we may be sure that within their recesses all organic matter and impurity is burnt up as certainly as if it had passed through a furnace; the oxygen of the air, intensified in its power by electricity, fastens upon it and changes it into the ultimate products of combustion—carbonic acid, aqueous vapour, ammonia, or nitric acid. Even without wind, any excess of gas is immediately re-

\* In Hugh Miller's "First Impressions of England and its People" (page 223), we find the following as referring to a colliery near Wolverhampton:—"The bottom coal rises to view, and where the surface has been cleared of the alluvial covering it presents the appearance of a moor, upon which a full-grown fir wood had been cut down a few months before, and only leaving the stumps behind. Stump rises beside stump, to the number of seventy-three in all; the thickly-clinging roots strike out on every side into what seems once to have been vegetable mould, but now exists as an indurated brownish-coloured shale. Many trunks, sorely flattened, lie recumbent on the coal; several are full thirty feet in length, while some of the larger stumps measure rather more than two feet in diameter. There lie thick around stigmaries, lepidodendra, calamitis, and fragments of ulodendra; and yet with all the assistance these lent, the seam of coal formed by this ancient forest does not exceed five inches in thickness. Not a few of the stumps in this area are evidently water-worn; the prostrate forest had been submerged, and molluscs lived and fishes swam over it. This upper forest is underlaid by a second, and even a third; we find three full-grown forests packed up in a depth of not more than twelve feet."

† The remains of the Mastodon are found abundantly in the third and fourth or Pliocene divisions of the tertiary fresh-water deposits. Also, but less frequently, in the deposits of the second or Miocene period."—*Knight's "Cyclopedia."*

\* By William Hughes, author of "Geological Notes of Ireland." Dublin: M. H. Gill and Son; W. H. Smith and Son. 1876.

\* MacLaren's "Geology of Fife and the Lothians."

† From paper by Arthur Ransome, M.D. Published in *Sanitary Record*.



moved by means of what was called by our great townsman, Dr. Dalton, "the diffusion of gases." Simply stated, this means that any gas can pass into the interstices between the particles of another gas, and thus mix itself up with it as readily as if it were passing into empty space. Then again, when the condensed vapour of which the clouds are composed is precipitated in the form of rain, it washes down some of these altered products, and prevents any excess from remaining there.

It has been calculated that 90,000 cubic miles of rain fall upon the face of the globe in the course of a year, and that it washes down in this time no less than  $1\frac{1}{2}$  millions of tons of ammonia. When we remember the great value of this substance to the farmer, and how that it is the chief part of his richest manures, we see at once both what a tremendous system of scavenging is being carried on, and what an invaluable assistance the product is to the growth of food for mankind. How, then, does it come to pass that there is such a thing as foul air at all? To account for this it will be necessary to look a little more closely into the sources from which impurity may arise; they may be grouped for the most part under three chief heads:—1. Trades and manufactures; 2. Putrefaction; 3. Respiration. With regard to the first of these groups, we have surely sufficient evidence in this smoky city of the extent to which they may pollute the air. And, without going into the controversy as to the direct effects of smoke upon the health, I may point to the indirect evils that it produces—the dirt that it fosters in our houses, the impossibility of opening our windows without letting in fine particles of soot, the consequent migration of all those who can afford to live out of town, and the sad abandonment of those who are obliged to remain, the loss of much that would benefit both poor and rich, if they could live side by side as they used to do, the failure of common effort to ameliorate the condition of the poor, and the decadence of public spirit amongst our citizens. These are heavy prices to pay even for the material prosperity that has come to us, and they are the more to be deplored since it has been proved that smoke is no necessary concomitant of that prosperity. If the outer air is thus polluted, the workshops and factories in which so many gain their daily bread are likely to be still more heavily charged with impurities. At one time undoubtedly this was the case, and it has been shown by Dr. Greenhow, in his report to the Privy Council, and more recently by Dr. B. W. Richardson, in his lectures before the Society of Arts, that very grievous evils result from the breathing of air laden with fine particles of dust of various kinds.

Dr. Greenhow, in his inquiry into the causes of lung disease, mentions amongst those who suffer most from this cause the grinders of Sheffield and Birmingham, the brass-workers of these towns and Wolverhampton, the tinnmen and enamellers of hardware and button-makers of Birmingham, and the card-room and cotton and weaving operatives of Nottingham and other places. Fine particles in the air, especially if they are sharp and irritating, do mischief in several ways. When dust is breathed by a healthy person, there is always an effort made by nature to prevent it from settling in the lungs. First, when it touches the opening of the windpipe, it causes an irritation there, and a message is at once sent by the telegraphic apparatus of the nerves that an intruder is trying to make his way in, the head office signals the breathing muscles to act, and immediately they contract spasmodically, and an uncontrollable cough is the result. If this fails at once to get rid of the offending particle, at the same time that the cough is ordered, certain little glands that are placed around the entrance to the air-passages are made to pour out a quantity of mucous, or phlegm, that envelopes the little speck of dust, and prevents it any more from touching the tender membrane upon which it at first fell. Just as a particle of coal or dust

getting into the eye causes the tears to pour forth and wash it away, so an irritant at the opening of the windpipe brings a flood of glairy fluid which both covers up the particle and carries it into a position from which a further act of coughing will expel it. If the dust should have been carried a little further into the air-tubes, a still further provision is made to convey it away before it has done harm, and this is accomplished by a very beautiful arrangement. Throughout the whole of the air-passages the lining skin—the mucous membrane, as it is called—is provided with myriads of most minute and delicate little hairs, called 'cilia,' less than a thousandth of an inch in length; these hairs are continually in movement, waving "like a field of corn bending before the wind," and then rising into the erect position, and as they always tend into one direction, namely, towards the mouth, they gradually carry any secretion, and whatever it may hold within its grasp, steadily and surely out of the lungs, and into the safer track leading to the stomach. If the particle is larger or more irritating than usual, directly it gets to the top of the windpipe another cough is ordered, and the morsel is expelled forcibly along with expectoration, and is ejected by hawking and spitting. This is the exquisitely beautiful mechanism that naturally guards the delicate lungs from harm.

### ADVERSARIA HIBERNICA.

#### LITERARY AND TECHNICAL.

THERE are many singular wills made by natives of this country, and not less remarkable are some of the "wakes," feasting, and funeral ceremonies that followed in honour of the makers and executors of these and other wills. Indeed several of our makers of wills evidenced strong wills of their own, and on their death-beds exhibited much anxiety as to the faithful performance of their strict injunctions. In not a few instances when the lips of these eccentrics were closed for ever, their heirs or the trustees of their property gave the go-by to the solemn injunctions of the departed. The account of the funeral expenses of William, Viscount Fitzwilliam, of Merrion, County Dublin, who lived in the time of Charles II., reveals some curious disbursements. William, the third viscount, who died 1674, is buried in the old churchyard of Donnybrook. Here are the items of funeral expenditure:—

	£	s.	d.
Paid Dr. Murphy att several times .. ..	3	3	0
Paid Quin, the Apothecary .. ..	2	9	10
Paid Kirurgion .. ..	0	9	0
Paid Clergymen .. ..	0	16	0
More paid them .. ..	4	10	0
More paid them .. ..	0	17	3
Paid for Revenerary .. ..	0	5	0
Paid for a Coach and four Horses to carry friends to his burial place at Donebrooke .. ..	0	10	9
Paid men for carrying the Links .. ..	0	11	3
Paid for Christ Church Bells .. ..	1	2	6
Paid the Ministers, Clerke, &c., of St. Nicholas' Church Within the Walls, within whose parish his lordship dyed .. ..	1	10	0
Paid Mr. Kearney, Herald-at-Arms, prout particulars under his hand .. ..	12	1	10
More .. ..	0	2	3
Paid for Frankincense, and a Messenger to prepare the Grave at Donebrooke .. ..	0	1	13
Paid for making the Grave there .. ..	0	2	6
Paid for his Coffin .. ..	2	10	0
To other expenses .. ..	0	17	7
Paid the first of January, 1675, to Mr. Dellane paid his Clerke, for his lordship's burial att Donebrooke .. ..	0	18	0

The entire expenses amounted to £32 19s. 9d.—a most modest and moderate sum, after all, for a nobleman, even allowing for the higher value of the money two centuries ago. Funeral expenses in this latter third of the nineteenth century, if left to the discretion of the ordinary undertaker, would swell enormously. While the friends and relatives are piling on the agony, Messrs. Sable and Plume are masters of the situation, and their mutes are silent as to the details, but keenly alive to the refreshers in meal or malt, or otherwise. We want a reform in our funeral customs, and in this country the needed reform should be preceded by the abolishing of useless and mischievous "wakes," which are really not acts of honour, but rather dis-

honour, and fruitful in many instances of indecency, disease, and crime. Many a respectable family are injured for the rest of their lives by the folly of extravagant funerals. Between a decent burial and a costly funeral beyond the means of a poor family, there is a vast difference. Our large cemeteries, too, are yearly becoming a huge, growing, and serious evil in many ways, injurious to the health and contamination of the water supply of our cities and towns. Before the present century expires it is most likely that the system of cremation will have firmly established itself. In the opinion of the present writer—and he does not stand alone in his views,—cremation will become the burial of the future.

In the last century, and early in the present, some attempts were made to establish places of resort and recreation in the vicinity of the city to rival those of Ranelagh and Vauxhall in London, places once famous, but whose sites are now covered with piles of buildings. We had, indeed, a Ranelagh Gardens on the now Ranelagh-road in Dublin, which for a short time became a popular place of resort for our play-going and fun-loving citizens. The Ranelagh Gardens of Dublin was made a fashionable lounge, and was considered a second Vauxhall. Here were well laid out gardens in accordance with the gardening taste of the time, and like the London gardens, there were fire-work displays. One William Castell Hollester, a noted harpsichord maker, of 40 Cuffe-street, in this city, was the enterprising speculator who devised these amusements at the Ranelagh Gardens, but though he laboured assiduously, the clerk of the weather most always doomed his greatest advertised displays to disappointment. The rain came in showers on occasion after occasion each time that poor Hollester had expended his utmost in care and money to entice the public. He laid out large sums to improve the gardens and make them more attractive, and his entertainments, whenever the weather permitted, were satisfactory, but "weather permitting," at last, became ominous words in his advertisements. Repeated losses through bad weather crushed out Hollester's hopes, and he was in bitter agony obliged to give up the gardens. The unlucky harpsichord maker had tried other schemes to amuse the public, but in each and all

"Unmerciful disaster  
Followed fast and followed faster, till his song, one burden bore,  
Till the dirges of his hopes that melancholy burden bore  
Of never—never more."

In the bitterness of his disappointment it is said, Hollester was heard to exclaim "If I turned a hatter, men would be, I believe, born without heads." Subsequent to his residence in Cuffe-street, Hollester lived and carried on business as a harpsichord maker at 10 South Anne-street. In a few short years afterwards the trade of harpsichord making gave way to the improved modern pianoforte manufacture, which at one period was a prosperous branch of musical instrument making in Dublin.

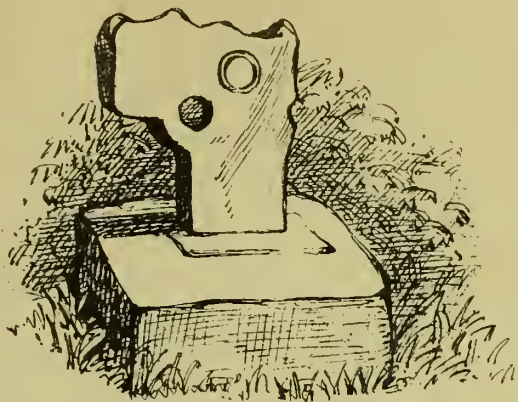
*Apologos*—On the grounds of the present Clontarf House, Drumcondra, another effort was made about 1818-19, by a Frenchman of the name of Duval, to establish a second Vauxhall or revived Ranelagh Gardens. Here wells and small lakes were constructed, the former converted into artificial spas by throwing into them quantities of old iron horseshoes, nails, &c., to give the waters a mineral taste. Swings and merry-go-rounds and other appliances were introduced on the grounds, and for a short time Duval's speculations promised to succeed. Citizens crowded out on cars on Sundays and holidays to taste the chalybeate waters, or to sip more animating liquids at the old Cat and Cage Tavern (still existing), or the not less noted "Ivy Cabin" in the village. The latter was kept by one Bacon, if we remember aright, but the house has disappeared long years since, and save in the minds of a few octogenarians, few of the memories in connection



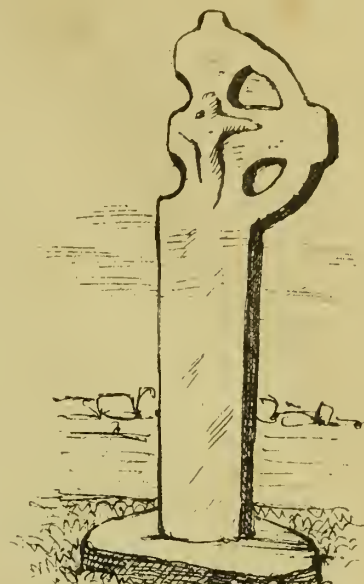
# ANTIENT IRISH CROSSES.



Near Bray 6ft high



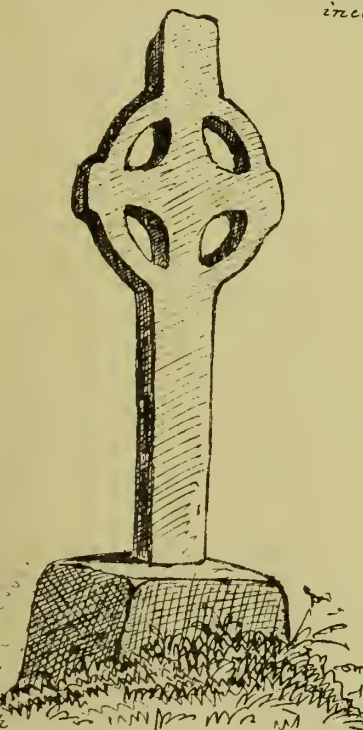
Kill of the Grange 4ft high including base



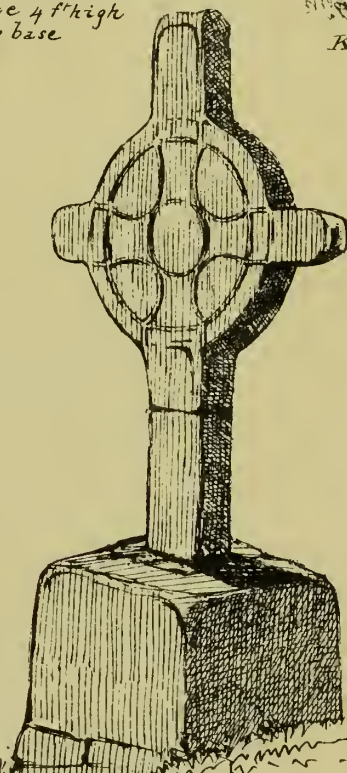
Kilgobbin 10ft high.



Tullagh Small Cross 6ft high Back



Tullagh Great Cross 13ft high



Finglas 10ft high



Tullagh Small Cross Front



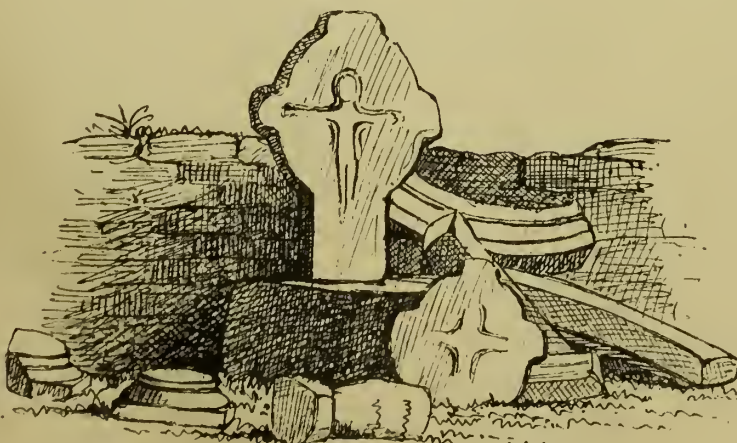
Incised Cross on the bases of the Crosses at Tullagh



Plan of small cross Tullagh.



Stepaside Front 2ft high



Kiltvee 3ft high not including base



Stepaside Back.



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exist. Duval's speculation did not last very long, but while in fashion the grounds at Clouturk were much resorted to. Drumcondra at that time was much frequented, for its old graveyard was one of the popular burying-places outside the city. Glasnevin Cemetery was then unthought of, and a long line of funerals might be witnessed there on Sundays, extending from the "Big Tree" in Drumcondra-lane (now Dorset-street), on and across the Tolka river to the noted "Cat and Cage." Drumcondra churchyard, before the opening of the Glasnevin grounds, received the remains of many celebrated persons in various ranks—architects, antiquaries, poets, wealthy citizens, clergymen of different creeds, Irish "rebels," and Bourbon refugees, gentry, and commonalty, all sleep their last long sleep under its historic sward. In the vicinity of Drumcondra village, many public and eminent men in the last century resided, and their mansions still exist, some as private residences and others as public institutions.

The memories of the old village are many, and an account of it, and the associations in its vicinity, would form a most interesting chapter of local history. How long will it remain unwritten? Had the present writer time and opportunity he would have attempted the task, but alas! the fates are at present against him, and time and distance are, perforce, weighty and serious considerations, and the memory depending upon the memory alone, is sure to overreach itself, and then—but what is written is written.

Among our last notes we instanced the abusive capacities of some of the latter-day bards in Ireland, who lived by exacting "black mail" for forbearing to scandalize, and obtained patrons for their works by dealing in fulsome eulogies. A difference, of course, must be struck between the fierce political satirists and magazine writers of the early part of the present century, and their predecessors the poetical satirists. The following is a specimen of the political personalities that characterised the pages of "Watty Cox's Irish Magazine" between sixty and seventy years since. It is headed the "Melancholly Condition of the Survivors of the Ancient Irish Nobility," and runs thus:—"Bryan Maguire, Esq. (whose ancestors in the beginning of the seventeenth century yet held considerable estates, the remains of their ancient patrimony, as princes of Fermanagh), is we understand at present in some hiding place to avoid the resentment which the descendants of Cromwell's cobblers have revived against the House of Fermanagh. Like the Wrestling Doctor's forefathers, the Maguires were losing personalities; while other men were digging potatoes, the princes of Fermanagh were masters of vast domains, at the time that the Verners were mending shoes for Cromwell's saints, and preaching the word over the coffin of their murdered sovereign. The vicissitudes of life are sadly instructive: the King of Prussia is now a turnpike man, and his master, the Corsican ensign, is an emperor. Verners, the cobblers, are hunting the Irish nobility, and the orange standard, banished from its native country, is unfurled for the purpose, among the smoking cottages of the O'Neills, O'Carrolls, and O'Hanlons, of Armagh, and the Maguires of Fermanagh."

The Bryan Maguire above alluded to was once a noted character in Dublin. He had the reputation of being a famous shot when in the army, which it is stated he was obliged to leave, as he was thinning the ranks too fast of its officers in duels, which he generally provoked himself by his abusive tongue. In his character of a civilian he was as great a dare-devil, and few indeed cared to accept his challenges, unless they were tired of their lives. Bryan Maguire was often, we believe, in hiding, like the "King of Mud Island," who was a good master to his workmen, but an inveterate enemy to creditors, bailiffs, sheriffs, rate-collectors, and tax-men. Bryan, by all accounts that have reached us, like

the above-named monarch, disliked to pay those who could do without it, and consequently often felt the felicity of being a "Sunday man," who enjoyed his "outing" on the Sabbath, but stayed within doors all the week, with a view to his personal safety. Watty Cox had reason in his own person to exclaim towards the close of his life that "the vicissitudes of life are sadly instructive." The "Corsican ensign," who became the emperor of France and the victor of victors and arbiter of Europe, died a chained eagle on a barren rock in the Pacific. Prussia of the "turnpike" king is now represented by a powerful German emperor; but it is unnecessary to pursue the subject further in illustration of the ups and downs of individuals or nations. True as ever, and for ever still as true, history will be found repeating itself. H.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

CONCLUDING with a very good season, and elate with triumphs worthily won, Sheridan proceeded in the spring to London to cast about for new attractions to bring forward on the Dublin stage. Woodward, who was at that time a rapidly rising actor, was engaged; and one Mechels, reputed to be one of the best dancers of the time. Both made their appearance in the following winter season. Woodward's first appearance was in the "Busy-Body" on September 24th, 1747, and his reception was cheering, and shortly he became a favourite with the public. Pantomimes revived, and new ones were arranged for by Sheridan, as Woodward could support the character of harlequin with effect, as well as that of comedian in a long list of comedies. Pantomimes, however, at that period were not successful in Dublin, and never proved as attractive as they did in London. The revived pantomime got up for the Dublin theatre, though well brought out, added but little to the income of the theatre, and the new pantomime brought out in the month of February was played to an audience under a hundred pounds. On the second night of the new pantomime Sheridan and Miss Bellamy appeared in the "Fair Penitent," to add to the attraction; still the receipts hardly realised twenty pounds. Notwithstanding these small receipts, the season, it would appear, proved a profitable one to Sheridan, and the benefits with the aid of Woodward were considered good.

To provide for the next season, Sheridan again proceeded to London, leaving Victor, the deputy-manager, to attend to the business management and general concerns in his absence. Hopeful of raising the Irish Stage still higher in point of excellence, Sheridan incautiously entered into expensive engagements which the public patronage at that period did not warrant him entering into. The engagement of Mr. and Mrs. Macklin were amongst those which might at that time be considered very expensive ones, considering the general receipts of the Dublin theatre. Sheridan agreed to give them £800 per annum for two years—a very large sum indeed then, a sum considered wonderful; yet the spirited manager paid these and other obligations which he entered into for the purpose of elevating the character of the Irish Stage—paid them, we believe, honourably in the full, although he was a great loser by them. Such spirited and noble conduct as that evidenced by Sheridan one hundred and thirty years ago is worthy of imitation to-day, and long years passed after his management in Dublin before his successors in the management of theatres here had the spirit or magnanimity to act towards actors as he did.

Musical pieces were becoming fashionable at the period of which we are writing, and Sheridan, always alive to the necessity of being up to time and not lagging behind, utilised every attractive and useful novelty.

The composer Lampe, who was considered one of the best in his line, was secured; Signor Pasquali, noted as a superior performer on the violin, was engaged as leader for the band. Considering the then state of musical talent, Mrs. Lampe, Mrs. Storer, Mrs. Mozeen, Mr. Howard, and Mr. Sullivan were all excellent in musical performances. We are told that the salaries of all these, "amounting to the enormous sum of £1,400 each season," proved a total loss to the manager. The profits, it is stated, did not reach to £150, the sum paid for the writing of their music.

The following are the pieces in which Macklin appeared:—Shylock, Sir Paul Pliant, Ben in "Love," Sir Gilbert Wrangle in the "Refusal," Scrub in the "Stratagem," Trinculo in the "Tempest," and others. All the above characters were considered masterly representations on the part of Macklin, and were much admired. Lappet, Lady Wrangle, Lady Wronghead, Nurse in "Romeo," and other pieces of kindred style, were well acted by Mrs. Macklin. Mrs. Bland was considered the best of Sheridan's engagements for that season, being a very useful and many-sided actress, doing business in both tragedy and comedy, and giving thorough satisfaction to manager and public, though her salary was moderate. Mr. and Mrs. Macklin, however, brought money this season, as might be expected, and added to the estimation in which the Stage was held under Sheridan's management.

In this winter Henry Brooke's allegorical piece of "Jack the Giant Queller," was produced, a great degree of attention being given to its production by the manager. It drew a crowded house, but party spirit ran high at the time, and the consequence was on the following morning an order came from the Lord Justices for its prohibition, so it was immediately withdrawn from the bills. It was not difficult to assign a reason for this prohibition, as well as for several other subsequent ones in the history of the Stage. The powers that were—i.e., the Government—felt the allusions in the songs; satirical hints, directed against bad governors, lord mayor, aldermen, and others were more pointed than palatable, and truth even in ridicule was not to be ventilated with impunity. Public opinion was still only in swaddling clothes, and the robust infant, though permitted to cry out betimes, was not allowed to articulate too plainly, even by way of jest. Some years subsequent, when party feeling ran less high, "Jack the Giant Queller" was revived and acted without any particular notice being taken of its performance. By that time, however, the playgoing public were becoming more exacting as to the quality of the pieces put before them, and Brooke's play had not sufficient merit in their eyes to ensure it a long run. We read that in this season in Dublin, a lady of good family, of the name of Danvers, made her appearance in the character of "Indiana," and "was received with singular marks of indulgence and approbation." She subsequently played Monimia, Athenais, Sigismunda, and other characters, with applause. Shortly afterwards she captivated the heart of the deputy-manager, Victor, and he made a captive of her, for both were married, the lady retiring from the stage. Of Victor himself, his capacity and career, we will have something to say hereafter.

Sheridan soon discovered that his receipts were not at all equal to his heavy expenditure, and towards the end of the season lost a great favourite with the public in the person of Miss Bellamy. Garrick had an eye upon her since they acted together in 1746, and, knowing her merit, was determined to secure her. She accepted his proposals and left Dublin for London, where she remained and acted for some years with growing success and established reputation. Brooke's alteration of Bank's "Essex," was next brought out on the Dublin Stage, and received with considerable favour.

Here is a play-bill of Smock-alley at this time, and its perusal will afford the reader a



good idea of the strength of the company, and the character of the entertainments exhibited:—

"By their Excellencies the Lord Justices' Special Command,  
For the Benefit of Mr. Watson.  
At the Theatre Royal, in Smock-alley,  
On Monday next, the 8th of May, 1749, will be presented  
a Comedy called  
**THE MISER.**  
(being the last time of performing this season).  
The part of Lovelace to be performed by Mr. Macklin.  
Frederick—Mr. J. Elrington. Ramelle—Mr. Barrington.  
Mr. Decey—Mr. Bernsley. James—Mr. Storer.  
Mrs. Wisley—Miss Jones. Wheelie—Miss Orfeur.  
The part of Harriet to be performed by Mrs. Vincent.  
Furnish—Mr. Dancomb. Sparkle—Mr. Watson.  
Sattin—Mr. Williams. List—Mr. Vaughan.  
The part of Mariana to be performed by Mrs. Bland, and  
the part of Lappet by Mrs. Macklin,  
With Singing between the Acts by Mr. Sullivan,  
Mrs. Lampe, Miss Storer, and Mrs. Mozeen.  
To which will be added a Pantomime Entertainment, in  
which will be represented the wonderful escape of  
**HARLEQUIN** *alias* **DON JUMPED** into a Quart Bottle,  
As it has been exhibited for sixty nights, with universal ap-  
plause, at the Theatre Royal, Covent-garden."

This programme of Smock-alley theatrical entertainment exhibited variety, but we are told the manager sustained a heavy loss by his agreement with the musical party. As he had to face another year, according to his obligations, Sheridan managed to transfer his musical performers to the Musical Society, held at the Music Hall, Fishamble-street, the site of the old theatre. This was indeed a profitable release for Sheridan, who received three hundred guineas, being the amount of the yearly subscriptions of the society, for had he been obliged to retain the musical corps for another year at Smock-alley, the weight of their salaries would have pressed him down.

Freed from one dread, Sheridan was not long in entering into fresh engagements, which turned out lucky ones. His next season proved a brilliant one. Smock-alley opened on the King's birth-day, November, 1749, with "Love for Love," Valentino, Mr. Sheridan; Ben, Mr. Macklin; Miss Price, Miss Mason; and Angelica, Mrs. Bland. This season Colley Cibber's son Theophilus paid his second visit to this country, and, we are told, added much to the strength of the comedies, and a Miss Griffith made her first appearance on the stage. This period was also marked by the first public appearance of two actors, who afterwards became remarkable, one of them particularly so—Henry Mossop and West Digges. The former was a native of this country, and his theatrical career embraces one of the most strange and eventful chapters in the History of the Irish Stage; but of its sunshine and shade, mirth and misfortune, joys and disasters, we will tell anon. West Digges was the first to come before the Dublin public in the tragedy of "Venice Preserved," on November 27, 1749. The cast was as follows:—Pierre, Mr. Sheridan; Renault, Mr. Cibber; Belvidera, Miss Danvers; and, as the play-bill has it, "the part of Jafier by Mr. Digges, a gentleman lately arrived from England, who never yet appeared on any stage." West Digges selected his part with judgment, and one which afforded ample range for his abilities. His reception was most flattering, and, with the exception of Mr. Barry, it was said that the public up to that time never witnessed so finished a figure. He displayed "feeling, tenderness, and variety beyond expectation," the only regret experienced was a little harshness of voice, which time afterwards harmonised. Scarcely had the new aspirant for honours conquered there by a brilliant *debut*, when the Smock-alley play-bill announced young Mossop for a first appearance. In fact the very next evening after West Digges made his *debut*, the bills announced the tragedy of the "Revenge," with these words:—"The part of Zanga by Mr. Mossop, a gentleman who never appeared on any stage." We may pause here for a while in our onward march to take up the threads in the early lives of Mossop, West Digges, Victor, and others whose careers became closely identified with the history of our Dublin theatres. Some were natives, some were not; but several of them in their own peculiar walks laboured lovingly and long, through bright days and dark days, to master their art, and with a

pardonable ambition to elevate themselves while earnestly bent in raising the character of the Irish Stage.

## QUALITIES OF TIMBER.\*

(Concluded from page 13.)

BEARING upon the qualities of Upper Gulf redwood, the short duration of the summer in these northern parts may be noticed: this is against the necessary operation of seasoning, a feature that is aggravated by the longer distance the wood has to travel to this country, and the greater length of time it is stored in the hold of the ship. It is a fact that wood goods from this district, more especially in the instance of boards, reach this country in condition far inferior to those from the central and southern districts of Sweden; and here we may note that the low standard of bracking tends to the shipment of goods in a green or unseasoned state. The custom of holding stocks over to insure a thorough seasoning, as is the case with the best stocks of Gelfe and Soderhamn goods, is rarely indulged in. The writer has had personal experience on the above point, and can record an instance of a ship arriving at loading port a few days before the stipulated time, and the shipper claiming those few days as being necessary, in face of the shortness of the summer, to complete or perfect the process of seasoning. The bearing qualities of Swedish redwood are fairly high, and in respect to endurance are equal to those of any other Baltic or European shipment, although it does not merit the distinction given it by Mr. Britton, who says, "Stockholm and Gelfe deals are not liable to be affected by dry rot." As with Gothenburg, so with the other Swedish ports, there are good and bad shippers, the best guarantee for quality being the shipments of the largest, oldest, and most respectable houses.

In reviewing the qualities of Prussian and Russian goods, we find the redwood of the south quick-grown, large, coarse, and unfit for use, except in bulk as large scantlings. These remarks refer to Stettin, Dantzic, Memel, and Riga. The two latter ports have a converted trade, but the deals and battens they produce, except being strong for bearing qualities, are coarse, sappy, and inferior. The size and strength of these woods are their special recommendation, and for these purposes they have no rival, except it be in the pitch pine of America. Like all other wood-producing districts within reach of commerce, there is year by year a falling off in size, one which cannot fail to be felt before long if the young growing wood continues to be slaughtered at the present rate for railway sleepers, lathwood, and other purposes.

The first port noticeable in the deal trade is Narva. This is a port on the south bank of the Finnish Gulf, in which position it performs draws its supplies from a southern source. The wood is here open-grained and coarse, but is kinder in quality than Memel or Riga goods, and as such is more suitable for board or wrought purposes.

Cronstadt, situate at the mouth of the Neva river, stands like a delta to receive the great mass of wood floated from the inland sea or lake of Ladoga. We have here a class of converted wood called "St. Petersburg," as various in quality as the situation of the rivers down which it is floated from its native forests. Its specialities are cleanness and kindness, for which qualities the northern districts, bounding the forest lands drawn upon by the White Sea ports, are the best. From being kind and soft, it is easy to season, and reliable when placed in work. It is a wood, although costly, that is easily wrought by hand; but for manipulation by machinery is not so firm, hard, and bright as the best brands of Swedish goods. The broad sizes of these goods is their great recommendation, but, like all other Baltic shipments, a falling off in this respect is observable. It need

scarcely be said that the manufacture of small-sized goods is yearly increasing, and that inferiority, like an attendant, waits upon this movement. With the exception of this falling off in size, there are a few of the oldest and most respectable houses who ship a quality of wood little inferior to that which characterised the early part of this century.

In pursuing our review our course lies along the Finland coast, where we are introduced to the growing ports of Wyburg, Fredricksham, Bjorneborg, Jacobstadt, &c., a district separated from Sweden, but closely associated therewith, through the ties of trade and kindred. It is noteworthy that during the last few years, owing to the depletion of the Swedish forests, the attention of the leading merchants of Stockholm has been drawn to this country, through which means the wood trade has been developed in a surprising manner. As a wood-producing country it is not backed or sheltered by mountain ranges, nor can it boast of features favourable to the growth and development of a superior class of wood. It possesses enormous tracts of virgin forest lands, in which matured trees are freely interspersed, but without exception they are hard, close, or slow-grown, qualities which lend value to small-sized goods, but which are fatal to those of larger or broader dimensions, inasmuch as they are associated with internal star or ring shakes. These are peculiarities which bespeak a sterile, inhospitable country—one whose internal parts are largely made up of waste and water. The larger sized goods of this country, with the exception of a few special shipments, are only suitable for bearing purposes; but the smaller sizes, the outgrowth of sound, well-hearted trees, are for machine-wrought purposes equal to the Gelfe shipments. From the more northern ports we have a kinder class of wood, one in which black or dead knots are again conspicuous. In the case of Uleaborg, sorting is but faintly resorted to, the various qualities being shipped together under the designation of "best," in which case they are in great part floated after manufacture—a custom, although somewhat general in America, unusual in the north of Europe.

The firwood of Finland, although somewhat resinous in character, is, from the close character of its growth, hard and dense, qualities which, extending to the roots, render them valuable for the manufacture of wood tar. It is matter of history that this trade has been long seated in this northern clime. From the fact of the shipments only being made to the capital of the Swedish kingdom, whence they found their way to the European markets, it took up the name of "Stockholm tar." This note is recorded in simple illustration of the qualities of Finland timber.

For wrought purposes, where lateral strength and durability are not elements of consideration, the redwood shipped from the White Sea ports of Archangel and Onega is the best that Europe produces. These shipments are justly celebrated for their broad sizes, and for the high proportion they can year after year maintain in comparison with the Baltic ports. Of the two shipments the Onega is the best, from the fact that the trees are the most sound-hearted; but the first quality is equally clean and kind from either port. As the larger and better kinds of Baltic woods become exhausted, the trade for fine brands naturally moves to these northern ports; the effect of which movement is an annual rise, one in the year in which we write that is close upon 25 per cent. In like manner the second quality, which closely assimilates with the inferior shipments of first quality, St. Petersburg is in large demand. It was remarked a few years ago by a gentleman largely interested in the wood trade, that he could see no reason why the best brands of first quality redwood should not in a short time become as scarce and dear as first quality Quebec pine. In argument there is nothing to advance against this thesis; but in practice it is remarkable how nearly they have now approximated.

\* From "Chapters on Timber," in *Timber Trades Journal*.



Speaking generally of redwood timber, the produce of these northern lands, the difference in quality, so noticeable even from the same port of shipment, is traceable to a variety of causes. One shipper, who has capital and appliances equal to the requirements of his trade, may be owner or lessee of forest lands, the timber growth of which is prime in quality and virgin in character. From this source he may, by careful selection, draw his annual crop of logs, which, when converted, classed, and seasoned, will produce a class of goods all that can be desired in point of quality. Another shipper, with less facilities, may simply be the owner or lessee of saw-mills, with which no forest tracts are associated; his logs may be drawn from forest owners over whom he has no control, or they may be collected piecemeal from peasant farmers. As a matter of course, good and creditable shipments under these circumstances are matters of the merest accident.

Another source of inferiority arises from small stocks being brought up under rigid stipulations as to bracking, and merged into larger stocks, in which the standard of bracking is not so severe; a profit is thus made by tampering with the quality. Again, when a stock is worked out, it is no uncommon thing for the mills to change hands, and the purchaser to continue the trade without the slightest prospect of being able to supply the same class of goods as they have previously been noted for. A system far too general is that of trading with inferior goods from parts which are noted for their high class of goods; in such cases shippers will guarantee their goods equal to the best brands, and will thus obtain prices far beyond their value, prices that would enable them to make allowances to their buyers, and still leave them with a selling price above their intrinsic value.

Another cause of inferiority arises from shippers having, as is often the case, neither interest in the mills nor the forests; but buying their goods here and there in a manufactured state, as may be presumed, they will not buy the best stocks of that particular port, but their actions will incline to the reverse, as in that channel lie their hopes of gain.

#### CITY IMPROVEMENTS AND SANITARY REFORMS.

THE Recorder of Dublin, in his address to the Grand Jury at the opening of the City Quarter Sessions, availed himself of the opportunity of administering some sound advice to local rulers and others concerned in reference to the sanitary condition of this city, and the Artizans Dwellings Improvements that are urgently needed to assist in the elevation of the social and moral state of the people. Although much of what the Recorder has given expression to has been reiterated again and again in these columns, still his remarks, pointedly and pertinently put forward, must command attention, and will, without doubt, be effective in hastening the reforms advocated. We subjoin a portion of his address, and commend it to the attention of all who are desirous of assisting in the good work:—

At the last quarter sessions I thought it right to bring before the Grand Jury two subjects of importance to this city to which my own mind was turned by what I had already seen of the cause of crime amongst us, and the need of trying to raise the classes from whom our criminals are chiefly drawn. These were: the opening of St. Stephen's Green and the application of Mr. Cross's Act of 1875. As to the first, to the great credit of all concerned, a cordial feeling and perfect understanding have been established. Sir Arthur Guinness renews his offer to discharge the debt, and transform the place into a pleasure ground. I believe this project, if carried out, will be a material instalment of the things I hope to see done in no distant

future for the happiness and elevation of our people. They need more amusements, wholesome and harmless, than they have, more solicitude and active sympathy from the classes and governing powers above them, and society, which neglects its obligations towards them, will have to pay for the neglect at compound interest in the long run, as we, perhaps, are doing now. Here, I believe, will be a means of cultivating that faculty for music so natural to our population. Lastly, I see here a medium for encouraging house gardening amongst the poor. This brings me to the second subject of which I spoke in October—the application here of the Act for Improving the Dwellings of the Labouring Poor. Here, too, a practical advance has been made by our Corporation, but its success or failure depends on the support it receives from public opinion in this city. I am convinced the problem this statute aims at solving is the gravest social question of our period. At last it comes to possess the minds and consciences of thinking men—not only of statesmen, philanthropists, even kings, but what, perhaps, makes more for its ultimate success, on the minds of our practical men of business, our merchants, and municipal bodies. High time it is. The simple God's truth is that whilst the homes of the masses in our great cities—and notably in this city—remain as they have been, our boast of progress is fantastic, and our talk about our Christianity is almost profane. It is preposterous to think society can be regenerated by sentences of penal servitude and the refusal of spirit licences, if nothing more be done. "It makes one's heart ache," said Mr. Councillor White, when moving the adoption of the improvement scheme in the Birmingham Town Council, "to listen to the tales of the poor people in going from court to court in the forlorn portion of the town. 'No good,' says one, 'trying to be clean here; we give it up as a bad job. Another said, 'What have people got to do but to drink here; there's nothing but dirt and nastiness to live in, and stinks and smells. The only thing to make people jolly is a drop of drink. I never drank too much till I came to this here hell of a place. The parsons tell us to be good; nobody can't be good in such places as these.'" Hundreds and thousands in this city are never in a wholesome home until they are sent to jail, hospital, or poorhouse. What a travesty of, perhaps, the healthiest of all the old maxims: "There's no place like home," when it means there's no place so foul, infectious, and abominable. More than ten years ago our Medical Officer of Health, Dr. Mapother, showed how the Dublin Improvement Act of 1864 had substantially given all requisite powers for enforcing sanitary law. Since then we have had the Public Health Acts of 1866, 1874, and 1875. And though it be true that the people themselves have been largely to blame, equally true it is that they cannot, without a radical reconstruction of their houses, and often of their districts, effectually help themselves; but it libels them to say they are incapable of improvement. That they can appreciate cleanly homes has been sufficiently demonstrated. As to the Corporation, they are very well able to take care of themselves. Yet, I will say this of them, that it is they who are now taking the initiative to put this statute in force here, and that they need the co-operation of us all. I visited Birmingham shortly before Christmas. Here the Corporation propose to spend no less than £2,000,000, but spread, perhaps, over ten years, the capital borrowed from Government, on the fifty years' system, so that £20,000 will be the annual maximum on the city rates. Against this they calculate in getting back directly at least three-fourths the enhanced value of the cleared areas, which they will sell or re-let, and the enhanced saleable valuation when the buildings have been reinstated. . . . . Remember, the title of the Act is for the improvement, not only of the homes of artizans, but of those of the labouring poor. Our spaces are not, speaking generally, so over-

crowded with houses as in the manufacturing towns, but our houses are overcrowded with human souls, and their arrangements are of the lowest average in the United Kingdom. In view of the statute law they are illegal, but so wholesale, customary, and systematic is the illegality, that complete enforcement of the law has been found practically impossible. The essential improvements cannot be effected in the wholesale by dealing with each house as a separate subject. Whether these are to be effected, as in Birmingham, by the entire clearing and reinstatement of whole areas, or, as I think in the way more suited to this poor and ancient metropolis, by utilizing as far as may be the brick and mortar which exists, in either case the houses must be dealt with not separately, but in groups; in the former case, for obvious reasons; in the latter, because if the improved houses can ever be re-let at rents to meet the poorer purses, it must be by amalgamating the residences and backyards, thus to form the common area of each little colony, and supplying for the general use playground, ashpit, laundry, and sanitary requisites, where decency shall be more regarded and sex recognised. Dr. Mapother has already reported to the Town Council no less than twelve areas which he has condemned as incapable of being made sanitary except by a comprehensive reconstruction such as the Act contemplates. The Corporation, judging, I think wisely, have not felt warranted to deal with more than two of these. Moderate as the proposal is, unless the Corporation be supported in carrying it out, as it is their first, so must it be their last effort in our generation to cope with this giant evil, and so far as they are concerned the ten other areas may be permitted to fester and putrefy. If those who have shown small regard to their house property in the past, sure to make the last shilling out of the wretched occupiers, refuse reasonable terms and insist on arbitration and traverse, and if juries support them by such compensation as the railway companies at times are met with, what should be spent in clearing fever nests will go in exorbitant purchases and litigation.

#### TIMBER TRADE NOTES.

MESSRS. Richard Martin & Co., of Sir John's-quay, send us a copy of their monthly circular, from which we take a few extracts:—

During the year which has just closed there was a large and well-sustained demand for almost all descriptions of wood goods for building operations, not only in Ireland, but throughout the United Kingdom. This increase in building operations may, we think, be traced to three causes—1st. The large amount of money now seeking profitable employment. 2nd. The desire of capitalists to invest their money in such a way as to ensure its safety, and to keep it under their own control; and, 3rd. To the very moderate prices of building materials, slates only excepted. Whether the present low prices of spruce deals will continue or not, we are really not in a position to say; for, although stocks in this market are ample to meet all reasonable requirements for some months, substantial advances have been made in the price at St. John's; and the stocks there are reported much smaller than usual. The Memel exporters have been obliged to pay the Jews, who bring the timber from the interior, as much as 40 per cent. advance upon last year's prices; and it is said, that notwithstanding this enormous advance, the lumbering business is not a profitable one, owing to the increased cost of labour, and the greater distance of the scene of each year's forest operations from the river. The prices of red deals we are compelled to advance at once, as we cannot replace our present stocks at anything like last year's rates. We would advise our friends to provide against such a contingency by purchasing their supplies as soon as they can. Slates continue to advance in price at the quarries, and the supply is limited.



## FAC-SIMILE TELEGRAPHY.

AN American paper, the *Philadelphia Times*, gives the following description of a system of *fac-simile* telegraphy, invented by Messrs. W. E. Sawyer and J. G. Smith, which was first put into practical operation last September at the Centennial grounds, being connected with a transmitting apparatus at the chief signal-office at Washington. Its reproductions of messages and charts have been extensively published, and the Signal Service Department, pronouncing the invention to be perfectly satisfactory, has adopted it for the telegraphic transmission of weather charts.

The present invention is the first to accomplish, practically, that great revolution in telegraphy by which the *fac-simile* of a man's handwriting, a map, or anything drawn upon a limited surface, can be transmitted in a moment from one end of the world to another. The circuit of the present apparatus is 150 miles in length. Before this invention the weather maps showing the results of meteorological observations at the various signal stations throughout the country, the isotherms, or lines passing through points having the same temperature; the isobars, or lines passing through points having the same barometrical indication, with other important information, were prepared in Washington only, being thence despatched by mail to all parts of the country, arriving at such places as San Francisco and New Orleans too late to be of any use, except as records. This difficulty appears to be overcome by the present invention. The operation reproduces exactly, at any distance to which a message can be sent by the ordinary telegraph, *fac-similes* of anything drawn upon paper.

The operation and construction of the instrument are extremely simple. A message is written, or a map is drawn, on ordinary paper with copying ink, or any ink to which has been added one-fourth its bulk of glycerine or other oily substance. The marked surface is then sprinkled with finely powdered shellac, which adheres to the lines for several hours.

The paper is then put, with the marked surface inward, upon a hot, thin zinc plate, and both are passed between pressure-rollers; the shellac is thus transferred to the zinc, and a perfect negative of the message or map is obtained in shellac, so as to give a copy of the message in a non-conducting material on a metal surface. This zinc plate, which is about six inches long, and five in width, is then wrapped, with the shellac impression outside, closely round a cylinder having a convex surface of equal area to its own, and this is caused to revolve horizontally by an electric motor. A screw of the same length as the cylinder, to which it is placed near and parallel, is also caused to revolve by the same motor. Along two rods parallel to this screw, and a little below its plane, moves from right to left of the cylinder a block of brass, in which is fixed a steel point touching the surface of the cylinder. This block has only a lateral motion, being worked by the screw, which acts merely upon its under edge. As it moves, the point describes an imaginary spiral line on the surface of the revolving cylinder. At the station at which the message or map is to be received, is an instrument similar to that just described, except that the imaginary spiral line is traced upon chemically-prepared paper, wrapped round the cylinder instead of the zinc plate. The cylinders revolve exactly at the same rate, as if they were both fast on one axle. When the transmitting point touches the shellac line the electrical current is broken, and the receiving point at the distant station strikes the chemical paper, and causing decomposition, leaves a dot there. Thus the operation continues until both points have traversed the entire surface of their respective cylinders, and the message or map on the transmitting instrument is reproduced on the receiving prepared paper. Whatever may be the original, whatever pictures,

hieroglyphics, or writing, it will be exactly reproduced.

It has been stated that by the present system of telegraphy an error is made for every three messages sent, whereas by the above-described method, whatever has been drawn or written on the original, must be reproduced at the other end of the line; one word cannot possibly be sent for another.

The chemical paper is taken from the cylinder, and the *fac-simile*, if that of weather lines, is traced upon a clay mould bearing the outline map. A cast of this mould is then made in type metal, and the weather charts may then be struck off *ad libitum*. Such is the dispatch attending this invention, that within two hours after meteorological reports have been received in Washington, from one hundred or more signal stations in the United States, weather charts showing the conclusions arrived at, after studying all these reports, can be had in any part of the country.

## CORK SCHOOL OF ART.

THE presentation of prizes to the successful students of the Cork School of Art took place at the close of the past month in the theatre of the Royal Cork Institution.

The Mayor presided.

After the formal opening of the proceedings, the head master (Mr. James Brennan) read the report for past year, as follows:—

## REPORT.

I have the honour to submit the report of the school for the year ending June 30, 1876. I am happy to state that the past year has been one of great success, not alone from the continued good attendance of students at the school, but from the character of the prizes gained; and this is mainly owing, I believe, to an increasing aptitude for doing good and careful work, which is developing itself year by year, and may, I trust, yet become a characteristic feature of this school. The number of students on the roll during the year was 217—116 of these attended the day classes, and 101 the evening classes. The number who presented themselves for examination in the second grade freehand, geometry, perspective, and model drawing, was 61, and of these 26 were successful. The number of drawings sent to South Kensington for examination was 467. In the national competition we obtained a national silver medal and two Queen's prizes of books. As the silver medal in the stage for which it was awarded (*viz.*, flower painting from nature) is the highest prize given, I think we may reasonably congratulate ourselves, particularly as the competition includes all the schools of art in the United Kingdom. The Department of Science and Art also awarded 17 third grade prizes of books for works sent up; one student was awarded a free-studentship, and one, having completed all the subjects of the second grade, receives the full certificate. By a minute of the Council on Education issued about five years ago, schools of art established prior to 1869 were allowed to teach the first three subjects of the science division, *viz.*—plane and solid geometry, machine construction and drawing, and building construction. We at once availed of the permission, and although at first the number of students attending for these subjects was very small, and indeed still continues comparatively so (considering the population of the city, and the advantage a knowledge of these subjects confers in some branches of technical education), yet the success has been great. Almost every year since the formation of these classes I have had to report that all the students presenting themselves for examination were successful, and this year I am happy to repeat it. Five students obtained Queen's prizes: in plane and solid geometry, 3; in machine drawing, 8; and in building construction 9 were successful. Mr. Mathew Mullins has again obtained the highest prize awarded by the Society of Arts for the technology of carriage building, *viz.*, second honours and £10; the competition being open to students from any part of the United Kingdom. The amount of steady perseverance exhibited by this student is deserving of special remark. He has gone on steadily, passing each examination from the second elementary stage upwards, until but one more remains, that for first honours. I trust we may be able to congratulate him on its attainment next year. The Right Worshipful the Mayor of Cork, Sir George Penrose, following the example of his predecessors, kindly offered prizes to be competed for. The competition in some of the stages

has been exceedingly keen. These prizes are productive of great benefits to the school, causing a sustained interest on the part of the students. Fifty-four works were sent to London, where the awards were made by an examiner of the Science and Art Department. The lending library attached to the school has been largely availed of; over 500 volumes were taken out during the year. The President of the Queen's College has kindly announced his intention of making the Botanic Garden attached to the college available to the students of this school, and that during the summer months cuttings of the plants will be sent to the school for the purposes of study, thus supplying a want that has long been felt. The co-operation of the Literary and Scientific Society, lately held at the Assembly Rooms, has to my mind proved that many of the citizens of Cork are in possession of really good pictures. A great benefit would be conferred on the school, in the absence of a local public gallery of pictures, by an occasional loan for a short period of paintings suitable for the purposes of study. I need scarcely say we would take the greatest possible care of any entrusted to us. In conclusion, I trust that the movement now on foot to provide better accommodation for the School of Art may be a successful one. No one except those thoroughly acquainted with the work can appreciate the disadvantages under which we labour. The students must be prepared to expect the standard of merit fixed by the Department to rise steadily year by year. The Department declares this in its last report; works that were considered worthy of reward twenty years ago would now be passed by, everything shows that the art knowledge of the country has considerably increased; and surely it is not too much to expect that when every town of any consequence in the kingdom is spending large sums in providing proper homes for science and art, Cork, with such an inherent love for art, will not allow its art students to be behindhand in the race for want of proper accommodation.

The report was adopted unanimously.

The Mayor then distributed the prizes, of which we print a list, with names of pupils:—

## PRIZE LIST.

Elizabeth M. S. Crawford: national silver medal prize for still life painting, and Mayor's prize (1st) for flowers painted from nature. Abina Mahony: national book prize for apples painted from nature in water-color, and Department prize for group painted from nature, Mayor's prize (1st) for same. Mary Coghlan: Department prize for ornament shaded from its cast in chalk; and Mayor's prize (1st) for do. M. Louisa Dixon: Department prize for apple blossom, painted from nature. Ellen Exam: Department prize for antique figure painted from the cast in monochrome. Mary Exam: Department prize for antique figure shaded, from the cast, and Mayor's prize (1st) for same subject. Mary Gould: Department prize for ornament shaded from the flat, and Mayor's prize (1st) for same subject. Kate Graves: Department prize for group painted in oil from nature; Mayor's prize (2nd) for same subject, and prize for excellent in model drawing. Lizzie Perry: Department prize for group painted in oil from nature, and prize for excellent in freehand, pass in geometry and model. Ellie Ransome: Department prize for ornament shaded from the cast, and Mayor's prize (2nd) for do.; pass in model. Susanna Schultz: Department prize for ornament shaded from the flat. Jane Seymour: Department prize for ornament shaded from the cast; Mayor's prize (1st) for do. Lizzie Walker: Department prize for flowers painted from nature. Elizabeth Woodroffe: Mayor's prize (2nd) for studies of fruit, &c., from nature. Mary Taylor: Mayor's prize (1st) for ornament shaded from the flat. Edith Graves: Mayor's prize (2nd) for ornament shaded from the flat. Sarah A. Adley: Excellent in model drawing. Helen Booth: Second grade certificate for freehand perspective, geometry, and model drawing. Annie Dunscombe: Excellent in freehand. Henry Jones: National book prize for antique figure, painted from the cast: Mayor's prize (1st) for do. Richard H. Holland: Department prize for reduced copy of frieze from the Parthenon, modelled from the antique. B. T. Leader: Department prize for group, painted in oil from nature. Micah J. O'Connell: Department prize for monochrome from the cast, in oil; Mayor's prize (2nd) for do. Richard H. H. Willis: Department prize for figure shaded from the cast, and Queen's prize, first advanced, for building construction. Ebenezer E. Julian: Second grade prize for excellent in freehand, and Mayor's prize (2nd) for ornament outlined from the flat. Wm. J. Hornibrook: Mayor's prize (1st) for ornament shaded from the cast; pass in freehand and model. James O'Sullivan: Mayor's prize (1st) for figure outlined from the flat. Cornelius Lynch: Mayor's prize (2nd) for do. John Meade: Mayor's prize (2nd) for archi-



tectural drawing. Charles Elwood: Mayor's prize (1st) for machine construction and drawing; certificate for do., second class advanced. Daniel J. O'Mahony: Mayor's prize (2nd) for do., science certificate for same, 2nd class elementary. Mathew Mullins: Second honours, certificate of the Society of Arts, and £10 for technology of carriage building, and Queen's prize for first class advanced plain and solid geometry. Robert Fleming: Queen's prize, first-class advanced for machine drawing. Eugene Crean: Queen's prize, first-class elementary for building construction. William O'Connell: Queen's prize, first-class elementary for building construction. Michael O'Meara: Mayor's prize (2nd) for ornament shaded from the flat.

**CERTIFICATES (ART DIVISION).**—Isabel Hughes, freehand drawing; Peter J. Keelan, geometry and model; Flora Lane, freehand and model; James Leahy, freehand and model; Percy Lewis, freehand; also Esta O'Callaghan, John A. O'Connell, Michael O'Meara, George Perrott, James A. Perrott, Louis Roche, Minnie Runciman, Charlotte Stopford, A. C. Swan, Jennie Hackett, (model), Alice Harding, Mary M'Ivors, Helen O'Mullane.

**CERTIFICATES (SCIENCE DIVISION).**—Practical, Plane, and Solid Geometry.—James Leahy, 2nd class elementary; Michl. Donovan, do.

**MACHINE CONSTRUCTION AND DRAWING.**—Charles Elwood, 2nd class, advanced; Daniel J. O'Mahony, do., elementary; William McBride, do.; Charles Warrenner, do.; George Perrott, do.; Henry E. Brown, second class elementary; John E. Hill.

**BUILDING CONSTRUCTION.**—M. J. O'Meara, 2nd class, advanced; James Leahy, 2nd class, advanced; Thomas Callanan, 2nd class, elementary; John Watson, do.; Michael D. O'Meara, do.; Albert W. Barnard, do.

Professor Armstrong read an address to the students of the school, in the course of which he remarked that it appeared to him that the cultivation of the art of painting was in these islands attended with peculiar difficulties, and he doubted whether it was an art for which their inhabitants had exhibited any strong instinctive predilection. Some of these difficulties were, the absence of artistic traditions, the gloom and damp of climate, and the want of such models of antiquity as those which were so familiar to the races of southern lands; but some of these unfavourable conditions were being rapidly neutralised. He congratulated them on their success during the past year, and wished them a life as artists of lofty enterprise and adequate achievements.

Mr. Denny Lane said he disagreed with Prof. Armstrong when he put such a low estimate on the performance of Irishmen in art, and he also disagreed with him as to the causes he had given. Prof. Armstrong alleged that under this dull and humid climate we could never come to see these glorious forms and scenes which built up the imagination of the ancient sculptors and painters of Italy. If that were the producing cause of the great artistic collections in former days, why did it not remain so now? Why was it that in every exhibition in recent years Italy, except in sculpture, was in the background? He remembered in the great International Exhibition of 1862, where works of art from all parts of the world were exhibited, the first of all artists was Gaites, a Belgian out of the fogs and swamps of Belgium. Where were the Italians? They were in painting (to use a sporting expression) "nowhere," and even in sculpture they were excelled. Now, in speaking of Irish artists, he would not speak of Maclise or Hogan, but he would mention two others; these were Foley and McDowell. He would ask any one that had studied sculpture, Where had there been in ancient or modern times such works as the "Youth at the Fountain," and others, the productions of Foley? Let them look at the Albert Memorial. All sculptors of the world were sought after for the purpose of this work, and two Irishmen were selected from amongst the entire group. Were they to be told then that they exaggerated their artists? He agreed with Prof. Armstrong it was a foolish thing to think too much of them, but it was disheartening to the young student to be discouraging his works. There was, in his opinion, very great capability in this country in an artistic point of view, and if that capa-

bility got a fair chance it could be developed to an important degree in European art. Mr. Lane went on to say that on one occasion he visited the Royal Academy. There were three remarkable works there, and one of the three was a picture called "The Widower." That was taken from the commonest of subjects, and yet was he to be told there was not as great pathos in that as in any of the works of Sophocles? Men had assured him they could not stand by that picture without shedding a tear. He was not one of those that believed in the great tragic works of the Greek heroes. He saw tragedies around him every day. He believed the real mission of the artist was not to go into the gallery exclusively and study what muscles Angelo drew, or what smiling faces Correggio painted—he was to go into the great gallery of nature. He (Mr. Lane) had seen more variations of the sky in Killarney in a single day, notwithstanding the humidity of the climate, than he had in Italy for a week.

### HYGIEIAPOLIS.

A SINGULAR SONNET.

Lawyers, doctors, and others, now direct  
The poor benighted British architect.  
Built in air, without a plan or plummet,  
Each house will be run-down from its summit.  
Run-up dwellings will run-out of fashion;  
They need plots, and finish with a passion,  
Heat without smoke, air and light and water  
Pure, for sire and son, and dame and daughter.  
Chimney-shafts will act for stairs internal;  
Roofs will bloom as gardens ever vernal;  
Man will rise and reach his highest level,  
'Neath glass domes, to live in health, and revel.  
Millennium's come, that terror of the "Jerry"!  
All hail! we're blest and happy. Very, very!

Isle of Health.

TIM BOBBIN.

### THE HISTORICAL DEVELOPMENT OF ART.\*

ETHNOLOGY IN ITS BEARING ON ART.

In our last issue we gave a limited notice of Dr. Zerffi's book, mostly confining our remarks to the first chapter of the work. The second chapter, on Ethnology in its bearing on Art, is a very suggestive one. Taking up the Negro as the first type for illustration, Dr. Zerffi shows that he occupies a very low place in the human family, and that mentally and physically he is deficient in power or purpose for elevating influences in relation to art. Civilized, or so termed civilized, European opinion is one thing in relation to the Negro, but the intelligent Negro opinion of the European is quite another. From our point of view, of course, the Negro has always been a savage type of the human species; and the white man, since he got the upper hand in art and science, has looked down with derision on his coloured brother. From the Negro, however, the white man has taken many hints, and has imitated his handicraft practices more or less, and improved upon them during centuries past. Here is Dr. Zerffi's opinion of the Occanic Negro, who he considers is the best of the group:—

"He is as slow of temper as merit, unskilled, his mechanical ingenuity being that of a child; he never goes beyond geometrical ornamentation; builds tumuli or triangular wigwags; lives on what he finds by chance, and, at best, hunts and fishes. His reasoning faculty is very limited, his imagination slow, but his perceptive faculties (the senses) are highly developed. He is altogether incapable of rising from a fact to a principle. He cannot create beauty, for he is indifferent to any ideal conception. He possesses only from 75-83 cubic inches of brain, his facial angle being about 85½ degrees. This lowest group of mankind branches off into different types. The general features of the

group have neither changed nor improved. The Negro is still the woolly-headed, animal-faced being represented on the tombs of the Pharaohs, because his bodily structure, his facial lines, have not altered during a thousand years. In studying the artistic products, the customs and manners of this group, we can picture to ourselves the state in which Asiatics and Europeans must have lived during the oldest stone period. The Negroes use the same kind of flint instruments, manufacture the same crude kind of pottery, adorn their clubs, paddles, and the cross beams of their huts with the same rope and serpent-like entangled windings and twistings, that are found in various parts of the globe of prehistoric time. The ruling lines of the face and head of the Negro are reflected in his triangular or mound-like architectural constructions."

Now, much of what Dr. Zerffi has written of the habits and customs and craftsmanship of the Negro hold equally good in relation to the early races in the British Islands. They were fond of hunting, fishing, fighting, built mound or beehive-like structures, painted and punctured their bodies, lived in huts or caves, made flint tools and instruments, were fond of rude carvings, and practised on bone and wood their rustic art, and did various other things kindred to the Negro ways, wants, and fancies.

In our Gothic architectural ornamentation of the middle ages, and at present, may be seen the improved development of early formings and carvings, serpentine or zig-zag sculpturing in stone, cross-beam and other beam ornamentation in our open-timbered roofs. The white man, though civilized and educated, is not in a position to throw very heavy stones at his Negro brother. In respect to the fantastic ornamentation of our persons, how far have we advanced? The custom among us of wearing rings in our ears, and numerous rings on our fingers is not extinct, nor is it likely to become soon. We dye our hair, educated and uneducated, as ladies and gentlemen did in the early days of Rome, and even centuries earlier. Let us not forget the scathing denunciation of the Prophet Isaiah about the behaviour of the ladies of his time, and the art and arts they encouraged in regard to personal ornamentation. Art, specially of a kind that denoted no very high moral feeling, though it evidenced art culture, was pretty highly developed at the time that the Prophet visited it with his fierce denunciation. If it was in part savage art, we are still living and greatly influenced by its savage influences. Isaiah thus speaks of the daughters of Zion with "their tinkling ornaments about their feet and their cauls, and their round tires like the moon, the chains, and the bracelets, and the mufflers, the bonnets, and the ornaments of the legs, and the head-bands, and the tablets, and the earrings, the rings, and nose jewels, the changeable suits of apparel, and the mantles, and the wimples, and the crisping-pins, the glasses, and the fine linen, and the hoods, and the veils." Alas! the scab, the stench, and the burning, that the prophet described are still prevailing symptoms, and there is not a little of the gew-gaw savage art influences alive in our midst. Education and the mixture of races have done much for moral, physical, and art elevation in Western Europe, and the same cause would also lift the Negro race, or would lift him in process of time, if the white man would treat him as a brother and not as a savage, to be stamped out or further degraded, instead of being improved and lifted up by civilizing influences.

Dr. Zerffi next treats of the Turanian, the Mongol, the square or short-headed, the traditional, the yellow man, and his bearing upon the development of art. Here is how this type of the human family is described:—

"His face is flat, his nose deeply sunken between his prominent cheeks; his reasoning faculty is developed only to a degree. He has small, oblique eyes, the lines being turned upwards, expressing cunning and jocularly. His mouth is less powerful than that of the Negro. He has broad shoulders, an expansive chest, thin and small bow legs, as if formed to use those of horses instead of his own; he is an excellent rider, but a slow though steady

\* "A Manual of the Historical Development of Art—Prehistoric, Ancient, Classic, Early Christian; with special reference to Architecture, Sculpture, Painting, and Ornamentation." By G. G. Zerffi, Ph.D., F.R.S.L. London: Hardwicke and Bogue.



walker. He looks on nature with a nomadic shepherd's eye, and not with that of a settled artist. He excels in technical ability, has great powers of imitation, can produce geometrical ornamentation of the most complicated and ingenious character, and in realistic imitation of flowers, butterflies, and birds, but has no sense for perspective, and no talent for shading. He is incapable of drawing the human form. Sculpture of a higher kind is unknown to him, though he can execute perfectly marvellous carvings, which, though quaint in design and composition, are wanting in proportion and expression. Faithful to his nomadic traditions, and the lines of his head and face, his architectural constructions take an according form. Like his facial lines the roofs of his houses are twisted upwards. The amount of brain in the Turanian averages  $83\frac{1}{2}$  cubic inches, and his facial angle is  $87\frac{1}{2}$  degrees."

Now, what does the above description prove? We think it proves that the Turanian possesses strongly the rudimentary constituent elements of an artist. He is realistic, and he is a good imitator, and all artists are more or less imitators. He has developed no small art tastes; he has shown himself to be a skilled self-taught craftsman, and handicraft is the parent of all executive art. He has done this, and continues to improve on older forms without the aid of schools of art, or art instruction, as educated Europeans look upon it; and, were better facilities by constant intercourse put in his way, the ordinary craftsman Turanian or self-taught artist would wonderfully advance. Education and good physical and moral training, and a mixture of other blood, would not only change the outer features of the ordinary Turanian, but would also effect an alteration in the head of the inner man. Settled industrial habits, a taste for reading and studying, and a concentration of the thinking faculties in a particular direction for noble aims and purposes, have the effect of stamping hitherto vacant faces with intelligent expressions. Take the lowest type of a British clodhopper in youth from the field, give him a good education, develop his physical strength and his mental powers by the usual methods, and what a different man he will be at thirty years of age than what he was at eighteen or twenty. The natives of the British Islands are powerfully influenced, and irresistibly led to adopt forms the out-growth of their own nature as well as the Turanian or yellow man. There are oddities in art and handicraft as well as in individuals, and also ever-recurring imitations. The professional and the unprofessional design, plan, and execution, are not always according to existing rules and forms, but according to certain personal fancies. A man's trade or art often works an influence on him in adopting and carrying into execution forms in building and art not recognised, or of an unusual kind. We have known coopers who took to building for themselves, who always adopted oval or rotund forms in structures that were raised for them. Shoemakers, believing that there was nothing like leather, we have known to insist on leathern fastenings to doors and windows, and in the shape of hinges, and leather worked into a variety of ornamental shapes for household, useful, and decorative purposes. Architects building houses for themselves, and using a variety of ornamental stones from various countries and localities; carpenters dispensing with bricks and plaster in a variety of situations, and introducing columns, capitals, friezes, and entablatures, at great trouble and cost, that could have been produced otherwise, and that would be more in keeping with the materials of the rest of their buildings, and of the site and its surroundings. In fact, without running through a long list of trades, we may state briefly that we have known several members of them prone to adopt forms and materials for building and art purposes the origin and use of which was common to their trade.

If there be any truth in the old saying that "every eye forms its own beauty," then the civilised man as well as the savage is moved and influenced by materials and forms that as a personal matter interest him most. Handicraft and art in all ages of its development, have been subject to myriad influences,

and what is taste to the savage mind is the reverse to the eyes and feelings of the scholastic white man.

Thirdly and lastly, Dr. Zerffi discusses the bearing of the Aryan race on the development of art; and this favoured race comes in for the highest encomiums as a matter of course, and perhaps as a matter of right. It should not be forgotten, however, that the Aryan is under great obligations to other races, and, having very favourable opportunities for improving, availed himself of those facilities. The Aryan has indeed, like many of our modern literary pirates, continued to pick the brains of other men beneath him, and has strutted not a little in borrowed plumes in an art direction. Dr. Zerffi writes of the Aryan with some degree of pleasure and enthusiasm, and it gives us some joy to read what he has to say of him, as we ourselves claim kinship with the favoured individual. The Aryan is described as "the oval-headed man (*dolichokephalous*), the historical, the white man, the crowning product of the cosmical forces of nature."

We have not space left us now for a chat as to the brain-power of the Aryan, his progress and conquests, and his influence in the world of architecture and ornamental art. We will, however, return to the entrancing subject, for the Celt has strong claims for being heard whenever the Aryan is brought upon the table.

#### ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At the ordinary general meeting held on the 8th inst., Mr. Charles Barry, President, in the chair, a number of Fellows and Associates were balloted for and elected. The President called the attention of the members to the proposed collection of drawings illustrative of ancient buildings restored. A circular was issued last July inviting members to contribute to the collection, but the appeal up to the present met with small response. Mr. Eastlake, the Secretary, said the Council had memorialised the Mayor and Corporation of Bristol against the destruction of the fine tower of St. Werburgh's, Bristol (of which a good view was presented to the Institute by Mr. Ferry), but with no result so far except getting an intimation that the memorial had been received. A discussion ensued on the subject on the part of Mr. C. F. Hayward, Mr. Dawson, Mr. Blashill, and Sir Gilbert Scott. The latter gentleman undertook to write to the municipal authorities at Bristol, calling attention to the fact that by the expedient referred to it was possible to retain the tower without inconvenience to the street traffic.

Mr. T'Anson drew attention to certain statements made in the press accusing architects of receiving fees or commissions from the tradesmen employed in works under their superintendence, as well as the usual commission of five per cent. Mr. T'Anson indignantly protested against the charge, nor did he believe that any member of the Institute could so far forget the traditions of what had always been an honourable profession.

The president, who had replied by letter to the statements made by a "Country Parson" in the *Times*, said that he had no doubt for a single moment when he was writing his letter that he was speaking in the name of every member of the Institute. The President of the Architectural Association had also addressed a letter to the *Times* denying the statements made in that paper. Mr. Cockerell announced the death of one of the honorary and corresponding members of the Institute, Mr. Henri Revoll, of Nismes. After some remarks by the President in reference to restoration going on at New Shoreham Church, and the kindly offer of Mr. Edmund Sharpe to go and look at the work of restoration in progress, Mr. John Lanyon read a paper "On Some Sanitary and Practical Appliances calculated to increase the Comfort of Dwellings." The paper included de-

scriptions of recently-patented inventions in regard to ventilation, improved closets, slop-sinks, kitchen ranges, and other household arrangements. Mr. Lanyon's paper was illustrated by diagrams and models of his inventions. A discussion followed the reading of the paper. Mr. Fogarty criticised the details of some of Mr. Lanyon's appliances as complicated and likely to get out of order. As to smells in water-closets, he thought chemicals afforded a better means of getting rid of them than appliances which were not thought reliable in action. A vote of thanks was moved to the author of the paper, after which Mr. Lanyon replied to some of the objections raised against his appliances.

At the next meeting a paper will be read by Mr. Fergusson "On the Temple of Diana at Ephesus, and the Hypæthron of the Greeks."

#### WOOD PAVING.

In reply to inquiries made by the Corporation of London, the Commissioner of Public Works in New York states that the experience of that city, where a considerable amount of wood paving has been under trial for some years past on an extended scale, is very unfavourable to it. It has been found after being laid two or three years to be very expensive to renew or keep in repair. It decays and soon gets out of order, notwithstanding that a great variety of attempts have been made to preserve it by saturating it with tar, corrosive sublimate, and other chemicals. Since the decay has taken place in the wood pavements many complaints have been made of the offensive and unhealthy effluvia emitted from it. It is recommended that it be all taken up and replaced with stone.

#### A LOCK-OUT.

SOME of the builders in the city gave notice on the 23rd ult., to the brick and stone layers in their employment that from the 1st January till the 1st March, they should submit to a reduction of 4s. in their weekly wages. This proposal the men rejected. In a letter the secretary of the body says:—"It is not a general lock-out of our trade, as all the other members are at work. We trust that the public will not give credence to this rumour that the brick and stone layers are on strike, for such is not the case, and we only wish to impress on the minds of those parties who are getting building works executed, that if those works are in any way retarded or at a stand-still, it is not the fault of the brick and stone layers, who are only resisting an attempt to reduce their wages, and which attempt they will resist at every risk and at all hazards."

#### CORRESPONDENCE.

##### TEXT-BOOK OF PLUMBING.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—Will you let me know in next issue of your excellent paper where I can get the Text-book of Plumbing on which I read an article in your paper some time ago, and also the price of it? Would you also let me know does it treat on branches of the plumbing, as I am an apprentice to the business, and want to learn all about it. Can I get it in Dublin?—Your obedient servant,  
88 Capel-street. IRISH PADD.

[We shall be happy to furnish our correspondent with a copy of the work on receipt of the published price, 3s. 6d. It has been specially compiled for the instruction of the "apprentice plumber." See our second notice of it in this issue.]



## HOME AND FOREIGN NOTES.

**ROYAL DUBLIN SOCIETY.**—On this evening a scientific meeting will be held, when Dr. Edward L. Moss will deliver a discourse "On the Recent Arctic Expedition." Specimens collected, and implements and clothing used will be exhibited.

**MUNICIPAL AUDITING.**—The Town Council of Leeds have resolved to expend the sum of £500 for an audit of their accounts, extending over the past ten years. Recent extensive defalcations in a northern municipal body in the sister kingdom, has led the Leeds body to undertake this desirable work. An audit for the last ten or several years of the Dublin Corporation accounts would, we fear, afford some startling disclosures, and 5s. no more than £500, are unlikely to be ever voted for such an audit. As the novelist, or penny-a-liner, writes it, the condition of the Dublin Municipal accounts can be better imagined than described.

**THE LEEDS ARCHITECTURAL ASSOCIATION.**—An architectural association has been established in Leeds. Besides the reading of papers and discussions, it will embrace classes for the study of special subjects. Prizes will be awarded, buildings will be visited by the members, and a sketch-book formed.

**THE WATER-CLOSET 'SYSTEM.**—The Barnard Castle Local Board are discountenancing plans of all buildings upon which are shown water-closets. They recommend earth closets—a system good in its way, but not generally applicable or suitable in all places.

**THE NEWTOWARDS HANDLOOM WEAVERS.**—There is great destitution at present among the woollen and handloom weavers in the above town. Meetings have been held to devise means for their relief, and providing for their future employment. The Marquis of Londonderry has subscribed £100 and the Marchioness £15 to alleviate the distress.

**ROSSLARE HARBOUR.**—The recent gales, though injuring many pier and harbour works, have not damaged the construction in this instance. The works are under contract by Mr. Farrell, one of the Wexford County Surveyors. The engineers in chief are—Messrs. Fowler and Ward; the resident engineer, Mr. Wiinder, being in charge of the works.

**THE HABITS AND HEALTH OF THE EARLY IRISH.**—A daily contemporary thus speaks of a lecture given at Kells by Dr. Mapother, our medical officer of health:—"The ancient glories of Kells have, to some extent, been revived in the learned lecture, sparkling with national statistics of much value, which Dr. Mapother has just delivered, on special invitation at Kells before a large audience, Archdeacon Nichols presiding. He rapidly but accurately sketched the social habits, sanitary condition, and bright historic memories of Ireland, from the plague which slew 9,000 Partholans A.M. 2,820 on the Dublin plain, to 1691 when Sir P. Dun prescribed for General Ginkle—"R. Chester ale, claret, potted chicken, and green geese." We but speak the sentiments of the entire auditory in saying that on no previous occasion have we listened to a lecture of more interesting or instructive character. The graver details were relieved by pleasant anecdotes and ample epigrammatic point. We trust that the progressive physician may yield to the wishes of many by making his discourse accessible to the public in the form of a brochure. If "The Book of Kells" were now open for entries, as of yore, Dr. Mapother's memorabilia would not fail to find record in its illuminated pages.

**PATENTS.**—The number of applications for patents amounted to 5,069 during the year just ended. This very greatly exceeds the number in any former year, the highest number previously having been 4,561 in 1875. The rapidity of the increase may be judged from the fact that the number in 1870 was 3,405.

**ARCHÆOLOGICAL.**—The *Athenæum* announces the formation of a "Shropshire Archæological Society" under the management of a number of the leading antiquaries in that country. The objects of the society are the printing of the historical, ecclesiastical, genealogical, topographical, geological, and literary remains of Shropshire, following in the steps of the Spalding Club, and other similar local societies. The number of members is to be limited to about 200, the subscription being one guinea per annum.

**TREASURE-TROVE.**—The *Sheffield Telegraph* states that an urn full of old coins, dating 200 years after Christ, has been dug from the Clouid Hill Lime Rocks, Breedon, Leicestershire. The workmen, making the discovery, it is stated, sold them. The Secretary of State became acquainted with the circumstance and claimed them as "treasure-trove" belonging to the Crown.

## TO CORRESPONDENTS.

**DRUMCONDRA AND GLASNEVIN DRAINAGE.**—We are in receipt of some correspondence on this subject, some endorsing the views we expressed on the two schemes criticised, and the rest dealing with the schemes generally. Pressure of time and space obliges us to hold over the above and other matters, which shall receive our attention, and be used if circumstances warrant their publication.

**MUNICIPAL TACTICS.**—The proceedings of our Corporation on the 10th inst. were very amusing and "obstructive." If not instructive. Whenever an appointment is to be made, there is invariably a "full house," for it is on these occasions that the "cat jumps." We have not space in this issue to deal with some corporate doings, but we have taken a note of them for future use.

**AN ARCHITECT.**—The subject has been already noticed, and will shortly again.

**A PLASTERER.**—It is scarcely necessary to open the question after such a lapse of time.

**C.E.**—The matter will be re-considered. Thanks.  
**RECEIVED.**—J. W.—J. R. Y.—O. B.—An Actor—R. A.—S. F.—Sanitis—Citizen—T. C.—H. N., &c.

**Epps's Cocoa.**—Some time since, in a series of articles in these columns upon food, we spoke in terms of unqualified praise of Messrs. Epps and Co's "Prepared Cocoa." The opinion we then expressed as to its purity and nutritious qualities has been fully endorsed by the public, as shown in its increased and steadily increasing consumption. We believe that Messrs. Epps's Manufactory are now the largest of the kind in the three kingdoms, and the total quantity of "Prepared Cocoa" consumed at the present time approaches four millions of pounds annually. This result is not surprising. The dietetic properties of native cocoa are well known, but in the form prepared by Messrs. Epps, Homœopathic Chemists, they are rendered additionally valuable, both on account of their increased nutritive power and digestible character.—*Civil Service Gazette.*

## NOTICE.

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

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## THE IRISH BUILDER.

VOL. XIX.—No. 411.

THE HISTORICAL DEVELOPMENT  
OF ART.\*

THIRD ARTICLE.

ETHNOLOGY IN ITS BEARING ON ART.



IN the following passage Dr. Zerffi portrays the long or oval headed Aryan, the crowning triumph of civilisation, the great art creator, teacher, and developer:—

"His facial lines are composed of two conflicting elements, the horizontal and the vertical line are framed by an oval. His amount of brain is on an average 92 cubic inches, and his facial angle 90 degrees. His development is not limited. This group of mankind, though divided into many different types (races or nations) which have arisen from an intermixture with the other two groups, or through the influence of climate, food, and the aspect of nature, stands at the highest point of civilisation. As the lines of his face are admirably counterbalanced, and his body is a masterpiece of regularity and proportion, he has tried to establish a perfect balance between the conflicting forces in his moral and intellectual nature. To him exclusively we owe art in its highest sense. Once he stood on the same level with the primitive black savage, then he advanced to the ingenuity of the yellow man, and left both behind him in his gradual but always progressive development. He surpasses the other two groups of humanity, not only in technical skill, but especially in inventive and reasoning powers, critical discernment, and purity of artistic taste. The white man alone has produced idealised masterpieces in sculpture and painting. The white man in his architecture uses either the horizontal or the vertical line, or both; he takes the triangular building of the negro and places on the square tent of the yellow man, making his house as perfect as possible; he goes farther, and in accordance with his powerfully

arched brow over-arches not only rivers and chasms, but builds his magnificent cupolas, and pointed arches the acme of architectural forms."

The above extract is very pleasant reading, indeed most flattering to all those races of people claiming kindred with the great Aryan family in blood, and speaking in varying tongues, one or other of the Indo-Germanic, Indo-European, or Aryan languages. Leaving language aside for the moment, we must say that much of what Dr. Zerffi has written of the Aryan will hold good in regard to the two former types, whose ethnology he has described.

As the pupil very often distances his master, though indebted to him primarily for his education, art, or craft, so it has been with favoured races as with individuals. The white man certainly once stood on the level with his primitive black brethren, and through successive centuries continually advanced, distancing other races in the "march of civilisation"; but still we have only to look around us in the British Islands and other civilised countries to find types of the white man as profoundly ignorant and as physically low in form, feature, and expression as any coloured boor in the wilds of Asia, Africa, or America. Let the white man of Western Europe be degraded and kept by tyrannical influences in abject ignorance of a supreme Being, a knowledge of letters, or of respect for the laws; remove all the moral and social elevating influences of education and religion out of his reach; keep him ground down as a land serf, a mine serf, or a mechanical slave, and you will not be long in developing him into a degraded creature, with no higher motives to buoy his life up than the gratification of animal instincts. Even in this low and savage state the white man, like his negro brother, will develop, from the force of wants and the necessities of life and living, a certain handicraft skill. Lighten then gradually the load of his oppressive restrictions, give him more freedom of choice, action, and utterance, and improvement will soon be visible. His self-reliance will accomplish much unaided; but with external help and philanthropic care, directed by society or a government, the white savage will become a semi-savage, and the uncivilised semi-civilised. Nature teaches much to the observant mind, expanded by education and warmed into activity and physical action by good examples.

We may imagine and write much of possible phases of primitive society, but there must be a limit to our opinions if they are to be accepted as a basis for tracing the development of language or art. Dr. Zerffi has been tempted now and again to soar into realms ideal, and of extracting therefrom fleeting forms, under-glimpses of the buried past, and of giving them an embodiment. His "Tree of Art" is very good as an illustration of possible progressions, though we would hesitate to adopt it as the tree of the world's art, in all its wide stretching roots and overshadowing branches. We have had in this mysterious and very old world of our successive waves of civilisation and intermittent barbarism. Great empires have risen and fallen, and almost their very names and histories have been blotted out. Barbarism again and again reigned supreme over the sites of majestic cities and temples, and even now scientific and artistic research is revealing much to us that heretofore lived in the fabled song of our early poets. Fable has given way to well-grounded tradition,

and tradition to authenticated history, and philology is making strides in illustrating the development and practice of art in the earliest times.

Ethnology in its bearing upon art is, no doubt, a very interesting study; but the language of certain nations in its influence upon art would also be a field worthy of investigation. The great German philologists Bopp and Pott have done much in the fields of philology, and of late years the labours of Max Müller have led to a wonderful revolution in the opinions formerly held as to the antiquity of the Celtic language, and its close affinity to the Sanskrit. It would be well, however, if it was finally settled for good whether the Sanskrit form of root or the pure Celtic is the oldest. Max Müller writes: "As sure as the six Roman dialects point to an original home of Italian shepherds on the seven hills of Rome, the Aryan languages point to an earlier period of language, when the first ancestors of the Indians, the Persians, the Greeks, the Romans, the Slaves, the Celts, and the Germans were living together within the same inclosures, nay, under the same roof."

Much speculation has been indulged in as to man's primitive language, and Ireland has produced not a few votaries and scholars who have put in strong claims for the Celtic. The still living Irish language, the Celtic of the Celts, can supply roots not to be found either in the Sanskrit, Greek, or Latin; and Irish letters are unique in their creation. O'Flaherty, in his "Ogygia," says:—"It is obvious our letters were not derived elsewhere, nor are they indebted to any other nation or idiom, as the words imposed on them have a peculiar signification in the idiom which they compose. Each letter has borrowed its appellation from trees; the name they have got confirms the ancient order of them."

While digressing here upon language (if it is a digression), the thought occurs to us that an Irish clergyman and Celtic scholar in our midst, the Rev. Richard Smiddy, has supplied a number of suggestive derivations in his "Notes on the Celtic Language" appended to his book, "The Ancient Churches and Round Towers of Ireland." In reference to the Aryan or Celtic tongue his remarks are singularly instructive and interesting. He writes:—

"*Iereus*, 'a priest,' and *ieros*, 'holy,' of the Greek, came from *adhradh*, or *iadhradh*, of the Celtic, which means prayer and adoration. The Druidical priests were called *Arain*, that is men of prayer or adoration, and by the name is specially meant a 'judge,' for these priests were the legislators and judges of their people. In ancient history there is frequent mention of a great people called the Aryans whose original settlement is traced to Central Asia, and who afterwards spread over vast countries of the world, from India to Scythia. Their language, the Aryan tongue, ranked high in antiquity. 'In the Sanskrit,' says Max Müller, 'in the hymns of the Veda, *Arya* occurs frequently as a national name of honour, comprising the worshippers of the gods of the Brahmins.' It is the Celtic alone," continues Mr. Smiddy, "which gives the true root, namely *Arain*, men of prayer or 'adoration.' They were the Druidical people, and their religious tenets are to be found among the Brahmins even to this day. In the law-book of the Manvas India is called *Arya-avarta*, which means 'the abode of the Aryas.' Ireland has also derived her ancient names from them. *Erinn* is formed from *ia-arain*, the island or country of the men of prayer, that is of the Druidical legislators or judges. Max Müller derives the name Aryan from the Latin word *arare*, 'to plough,' probably from his want of knowledge of the Celtic. This, however, does not take away from the great value of his researches upon the subjects. It is curious that even to this day, Persia, an old Druidical country, has the

\* "A Manual of the Historical Development of Art—Prehistoric, Ancient, Classic, Early Christian; with special reference to Architecture, Sculpture, Painting, and Ornamentation." By G. G. Zerffi, Ph.D., F.R.S.L. London: Hardwicke and Logue.



name Irann from the Aryans. Aran, or Arain, is formed from *adhradh* (pronounced arrah), 'prayer,' and *an*, 'man.' The Latin word *orare*, 'to pray,' came from *adhradh*; and thus if Max Müller said the Aryan came from *orare*, 'to pray,' instead of *arare*, 'to plough,' he would be nearer the truth. The Celtic is the Aryan tongue."

Whether Professor Max Müller has tried to digest the Rev. Mr. Smiddy's derivations, we know not; but Dr. Zerffi, who, if we are not mistaken, is also a German, might feel interested with the subject as here presented in connection with the ethnological characteristics of the Aryan race.

Here is another extract from the "Notes" of Mr. Smiddy, and it certainly comprises a nut or nuts for cracking:—

"A large proportion of modern philologists think that man's original language has perished, and that the oldest tongue now known contains only fragments of it. Professor Max Müller is of opinion that the word which represents *twenty* in the Sanskrit, in the Greek, and in the Latin, is the mutilated fragment of a lost language, as the root of it cannot now be found. The root of it, he says, should be *two-tens* or twice ten, and that cannot be found in the word in either of these languages. In Sanskrit the word 'twenty' is *vinsati*, in Greek, *eikati*, and in Latin, *viginti*; the three being evidently cognate formations. But if he had known the Celtic, he would have easily found the roots of the word in it. In the Celtic it is *fiche* or *fichid*. In the Latin the word was originally written *figinti*, as the letter *g* in that language was adopted only at a comparatively late period. *Fiche* of the Celtic and *figint* of the Latin resemble each other much. But the Latin supplies no root of the word itself. Is it so with the Celtic? No; *fiche* is formed from *fe-dho-deich*, which means "twice ten," the very root which Max Müller says must have existed in the original lost language. Thus, the Celtic supplies the word and the meaning, which could not be found elsewhere."

The Rev. Mr. Smiddy even puts in a claim for the word *Sanskrit* being Celtic, the word meaning "old writing," from *sean*, "old," and *sgribhin*, "writing."

The intermixture of races has worked wonderful changes in the history of the world, morally and socially, and in other ways; but, despite the greatest culture, old savage instincts are still strong. An educated people as a whole is the great leavening power; but irresponsible kings and princes and other rulers, when they exercise despotic powers, are the great peace disturbers of the world. Rulers with an insatiable greed of conquest are destroyers of true art, instead of real encouragers. They may bestow for a while a certain fictitious riches upon their country by conquest and plunder; but art collections husbanded only for kingly or private-class uses is not art development, but art demoralisation. No nation should strut in borrowed plumes, decking itself with the arts and ornaments of another nation, and, while profiting by the lessons afforded by the beauty of its artistic forms, ignoring at the same time the fount from which it drew its inspiration to essay a higher development of kindred products and creations.

#### ROUND TOWER LITERATURE.

THAT ever-fascinating subject which for centuries has engaged the pens of architects, antiquaries, engineers, doctors, lawyers, travellers, artists, poets, clergymen, and craftsmen, is likely still to afford fields for the research of similar minds. The Rev. Mr. Smiddy, whose interesting work we reviewed some months since in these columns, during the course of our articles on the "Literature of Gothic Architecture in Ireland," has issued the "Round Towers" portion of his "Essay on the Druids and

Ancient Churches" in a separate form, appended to which is the "Public Correspondence in Defence of the Theory on the Round Towers," which originated in the IRISH BUILDER. It is not unlikely that we will soon see another work on this fruitful question, and diametrically opposite in view to that propounded and enthusiastically defended by the Rev. Mr. Smiddy. Miss Stokes's lately-published essay propounds, after all, no distinct theory; it is a "Christian" theory, to be sure, like that of Petrie, and, unlike that of Lodwich and his disciples, anti-Danish.

In his christian baptistery theory we believe the reverend writer of the book under notice stands alone, and, as might be expected, has more assailants than adherents. It has been the peculiar characteristic of every propounder of a theory on the origin and uses of our Round Towers to possess an implicit faith in his own views; and as faith, it has been said, is strong enough to remove mountains, enthusiastic faith and labour on the part of various writers have, in the course of several years, removed many obstacles from the way, in arriving at a better solution of the Round Tower problem. Without agreeing with all that the Rev. Mr. Smiddy has written, we can at the same time cordially commend his work to the consideration of the general, as well as the strictly architectural and archæological reader. His book on the Round Towers in its present form is a handy and inexpensive brochure, and together with its appendix it is a readable, interesting, and scholarly production.

#### FEMALE EDUCATION AND INDUSTRIAL EMPLOYMENT.

##### THE QUEEN'S INSTITUTE.

We have more than once called attention in this journal to educational and industrial wants in the interest of a large class of respectable females, for whom hitherto in this country very few opens or avenues have existed for bettering their condition. The establishment of the Queen's Institute in this city has supplied the want to some extent, and it is still capable of enlarging the sphere of its usefulness, if Government would help it, and private bounty, either in union or apart, would supplement that assistance.

A very numerous signed and influential memorial was recently addressed to the Prime Minister on behalf of the Queen's Institute, and showing its strong claims to be included in the proposed scheme embraced in the establishment of a Central Museum in Dublin. It sought a representation on whatever board might be formed to govern the new institution, and to receive a portion of the parliamentary grant made to this country for the support of its public institutions and for educational purposes.

It may not be amiss to again state that the Queen's Institute and College comprises three departments: the first embraces the Female School of Art, under the Government Department of Science and Art, South Kensington; the second includes a number of art industries suitable for ladies, which are taught by qualified teachers, and in connection with which are technical schools for imparting a practical education suitable to a number of avocations for which females are fitted, and by which many who have been taught are at present profitably employed, privately and publicly. The third depart-

ment of the institute embraces a preparatory school, a higher school of advanced education, and a school of music.

We should not omit to mention that a peculiar feature in the Scrivenery Branch is that of instruction in the illumination of addresses, ornamental writing, &c., creditable samples of which we have recently inspected at the Institute.

The Queen's Institute is now adding to its manifold usefulness by establishing a new department of art—Needlework,—in which ladies will be taught all varieties of artistic needlework. A similar one has been successful in London, and we see no reason why it will not be equally successful in this city. There are hundreds, nay, there are thousands, of respectable females of the middle, age, and of the so-called higher classes who, though well educated in the ordinary way, are strangers to technical instruction, and still greater strangers to any species of skilled employment by which (if adversity overtook their families) they would be enabled to support themselves or make their way through the world. We would earnestly recommend parents of limited and precarious incomes to study their daughters' future welfare, and embrace the opportunities offered by the Queen's and similar institutes. Education of a practical kind, and industrial art instruction such as that imparted by the Queen's Institute, will be a forearming for all females against possible reverses. Practical knowledge and industrial skill, once obtained, is like the acquisition of a trade—it can be carried on the finger ends, and will be ready for use if exigency demands it.

In connection with the art classes of the Institute it is intended in the course of the spring to hold a Loan Exhibition in the Exhibition Palace. It will embrace specimens of ancient and modern needlework, needlework fans, church work, embroidery, needlework for upholstery, historical costumes, and other classes of work. This will, doubtless, be a very attractive display.

There is one special need which the Institute stands in want of at present, and that is—a want of room. The premises in Molesworth-street are no longer large enough or suitable for the expanding operations of the Institute. With help for the Female School of Art, and a new and well-arranged building for the conduct of its several departments, there could be little doubt but that the Queen's Institute and College would long continue to exist and prosper as an indispensable foundation in this country.

#### CORRESPONDENCE.

##### "PLUMBING."

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—The articles under above heading in your issues of December 1st, 1876, and January 15th, 1877, are certainly able, racy, and exhaustive. I must confess that my humble effort in a literary way scarcely deserved such lengthened notice, although the importance of the subject might. I am sorry, however, to see the author making a very grave mistake in the first column, page 18, January 15th, when he states that the "improved perfect thorough ventilated and separate system, with trapped drains," of Messrs. Maguire and Son, of Dawson-street, Dublin, "is a step in advance of Buchan." Now, when we look at the diagram illustrating this "perfect and thorough ventilated" system, we find that in no case is the branch pipe of either the w.c. soil-pipe or the waste-pipe from the bath, &c., ventilated! I need



not enlarge upon the bad effects often produced by this omission, but would respectfully request to be allowed to hint, through the medium of your journal, that if the authors of this so-called "perfect system" were to take a leaf out of Buchan's book, and carry a ventilating pipe, as he does, from the top of the outlet of the trap back into either the soil-pipe or the ventilating pipe of the soil-pipe—or waste-pipe, as the case may be,—then "this improved system No. 4" would be a little nearer perfection than is shewn in the illustration given at page 18.

W. P. BUCHAN.

Renfrew-street, Glasgow,  
January 18th, 1877.

This letter of Mr. Buchan's, which we willingly publish, is but an instance of his zealous effort at sanitary progress, according to his lights. We do not understand why he feels "sorry to see the author," as the feeling is not reciprocal.

If he has a "strong weakness," it is in his effluvium-pipe; as an instance of this, we find that his fig. 264 in a very usufructuary manner applies M'Kinnell's ventilator to the trunk of his w.c., introduced, as the lawyers would say, "for excess of caution," and the result is Buchan's *patent dual* effluvium-pipe; verily there are some who would take out letters patent for the sole right to use God's sunlight, and would seek the royalty thereon, if they could get it!

Our remarks as to the "perfect system" were very pointedly directed to the benefits derivable in first-class houses under certain favourable circumstances, from the "two distinct drains," "one being for w.c. soil-pipes and foul water, the other for clean water overflows of scullery sinks,\* wastes of baths and washing-troughs, the same attention to ventilation and trapping being observed with equal care," &c. This double drain (where circumstances admit of its application, and that it does not produce complication) is the "step in advance of Buchan" to which we alluded; and inasmuch as the soil-pipes, including the branches open to same, are, in the system under consideration, the channels or funnels for a constant automatic current of fresh air from bottom to top, there is no real necessity for attaching this ventilation-pipe to the branches, although it has within our own knowledge been similarly applied long before Mr. Buchan was bitten by his soil-pipe ventilating mania; and we instance his own figs. 267, trap v, and fig. 269 to show that in this respect he does not practise all that he preaches, and from them we also show that even he does not consider this ventilation-pipe to be another *sine quâ non*, but uses it only occasionally, when, in "holy rapture," he rides his hobby and ventilates his ideas as well as his branch-pipes. Furthermore, it would be particularly injudicious to put in these small-bore, bye-pass ventilation pipes, leading *à la* Buchan "back into the soil-pipe" and open-mouthed, to be choked and rendered inoperative by the first down-rush of matter from apparatus on the upper floors.

There would have been an excuse for fixing some such vent-pipe—*properly arranged*—from the top of the outlet of the trap, if there had been no arrangement made for the ingress of fresh air at the bottom of soil-pipe, the ascension of which vigorously assists the levitation of the foul gases therein. It is but simple justice to Mr. Buchan to state that his sections, figs.

264 and 273 show a preferable mode (in principle and practice) of providing this ingress for fresh air; but the application of this provision is peculiar neither to Mr. Buchan nor Messrs. Maguire, and various modifications of it are in use by all sanitary house constructors and first-class plumbers. We would for this purpose readily recommend Mr. Buchan's ventilating syphon traps, if he would discard the "perforated zinc" therein as the material for his intercepting grating. We need not again revert to this pernicious practice adopted by Mr. B. of using zinc even for effluvium-pipes in plumber's work; and we have also to caution all apprentice plumbers who use patent ventilating syphon traps, never to perpetrate such an unsanitary application as shown in fig. 268, where the drain into which it should discharge is actually higher than the body of the trap. Fie, fie, Mr. B.; but we will lay the discredit of this on the *Building News*, which danced the shilly-shally good bye in April, 1876, to all the dirty details of sanitary progress, and in a most ungrateful manner bid Mr. Buchan take his exit from its niffy-naffy columns; but in this, as in other respects, it is more nice than wise. They have made some blunders in Tavistock-street in their day, as instance their rash and hasty advocacy of the inviolability of Tobin's patent rights; and if we are to believe its own statements in February 4, 1876, that "clear-the-way" publication is a losing game, and is actually sold at less than its cost; but like Sandy Macfarlane's whiskey—"tis the quantity pays, yer honner."

There is one section of "Buchan on Plumbing" which we have left untouched as yet, viz., Baths, Wash-hand Basins, Hot and Cold Water Supplies. As he has remarked in his letter, the "importance of the subject" might require a notice, which, unless we receive a veto from our readers, we hope to give shortly. Meantime, we beg to assure the author that our independent criticisms are offered in the best spirit, and with a desire to further and make popular the subject which he has at heart, and of which he is a most capable master. Our apprentice plumbers cannot fail to profit by taking more than one leaf out of his useful *Vade-mecum*, as we believe him to be a notable exception to Mr. Fogerty's bitter and sweeping charges recently at "the Institute, Conduit-street," anent the "carelessness of plumbers."

## HANDICRAFT TRUSTS.

### THE LONDON CITY COMPANIES.

WE have for several years past again and again directed attention, in the interest of education, art, and handicraft, to the anomalous position occupied by the members of wealthy bodies in London, anciently established as guilds of trade, but which have for a couple of centuries past become little more than close minor corporations or political feeders to the major Corporation of the City of London. The bodies to which we allude are what are generally known as the City Companies. Now, it is an indisputable fact that these guilds of trade—some of which, in one form or another, date back to the middle ages—owe their existence to handicraft organisation and to the protection of the rights of skilled labour, and other things appertaining. As generation after generation advanced, new trade guilds cropped up, not only in London, but in several cities and provincial towns in the three kingdoms. Many members of these guilds, like members of other communities, died rich, and made bequests in money or landed property to their respec-

tive guilds, for various purposes. Education, charity, religion, the advancement of skilled labour, the foundation of charities and schools, hospitals, and other needs, were not forgotten. A large number of trusts were thus created, extending from the twelfth and thirteenth centuries down to nearly our own time. As each century passed over, many of these trusts, though originally moderate in value, assumed large proportions, particularly some of those connected with landed property. The intentions of the original donors were in some instances carried out in respect of distributing small sums at stated times in the cause of charity and education; but, despite the great and in some cases enormously augmented incomes accruing from properties belonging to the London City Guilds, the surplus every year growing larger and larger is looked upon by governing members of these City Companies as private property.

There are at present nearly eighty, if not more, guilds in London; several are very rich, but there are others which are not wealthy. Within the past few years some obsolete City Companies have been revived for nothing but political and party purposes. These guilds, as a whole, are only nominally trade guilds, for the larger body of their members is composed of merchants, traders, barristers, public writers, estated gentlemen, and, indeed, a variety of the well-to-do class, *bonâ fide* craftsmen being almost nowhere, except in the character of some wealthy employers of labour who may have originally risen from the ranks.

In these pages and in other pages at home and abroad we have persistently preached, in and out of season, for a re-organisation of the City Companies of London, and for a proper scheme for regulating and managing the trusts which they hold, and do not minister in the spirit of their formation. As the constant drop wears the stone, we are glad to find at last that, through the united labours of men actuated by the same motives as those which moved us, the ice has been broken through, and the City Companies are becoming amenable to reason. We are, however, not very sanguine that, if the City Companies are left to themselves, they will do what is absolutely required of them at this juncture.

When we first lifted our pen, and when other kindred pens in London were lifted in the same cause some years since, the City Companies and their advocates scouted all idea of any intermeddling with their properties, ignoring at the time that they were only trustees and not holders of the properties they claimed as their own. The cry of technical education has indeed within the last six or seven years been taken up by a few of the guilds, but what has been done in the way of voting a few prizes is mere child's play, and of little practical benefit to the cause of technical education and skilled labour. The organ of the London Corporation, and of course of the City Guilds, at last acknowledges the fact in these words:—"At any rate, it is believed that the time has now arrived for the united action of the guilds to promote technical education, not merely by a cold *dilettanti* patronage of weak imitations of fine art or childish curiosities of manufacture and manipulation, but by honest, hearty appreciation of the value of solid and finished workmanship, to which a sound knowledge of both science and art has contributed an additional worth to technical skill."

A Central Industrial or Technical University is spoken of, and other cognate institutions, but a mere money contribution for the raising of any big institution depending in a measure for its support upon the City Companies is not only what is required. Spurts of generosity or even of munificence with other people's money is not the way to effect a permanent reform. What is wanting is a thorough reform in all that appertains to the position of the City Companies of London, and the trusts they hold. As they exist at present, their fastest friends can advance no solid reason for their continuance. They need to be remodelled in accordance with

\* Termed "jaw-boxes" by the Glasgow ironfounders, probably to puzzle the architectural dons at the Institute, Conduit-street. It is not an Irish term.



the wants of the age, still preserving as far as is possible the spirit that called them into existence, and of making them not nominal, but truly real representative guilds of trade. If this cannot be done, the trusts these bodies hold will need a new scheme for their widened application for education, charitable, art, and skill handicraft purposes. It is strange, indeed, that while all the corporations of the cities and large towns of the three kingdoms have felt the besom of reform between thirty and forty years ago, the London Corporation continues down to the present hour with all or a number of its defects intact. The Municipal Reform Acts tumbled over the old corporate system, and here in Dublin, as in other places, we lost our old trade guilds in consequence. London has continued to preserve hers.

We cannot say much in favour of the old City Guilds of Dublin, for at the time of their extinction they were corrupt, sectarian, and political clubs, feeders also to the old Municipal body, and only nominal guilds of trade. Providence only knows what became of a large amount of the property originally held by our Dublin guilds, and in whose hands it is at present. The little removable property held in the meeting halls of the Dublin guilds, was on the eve of the passing of the act that extinguished them, carried away and divided among the members. To what extent the property of the London City Companies or guilds have been sold or bartered, and their funds voted away for questionable uses, we shall never know.

"The Irish Society" which is made up of a number of the City Companies of London, since the time of James I. has held large landed estates in Londonderry, Coleraine, and other places in the north of Ireland. As we have recently told the history of this "Plantation," we will not enter on it here, except to say that the Government should at once carry out the scheme which has been recommended for relieving the so-called "Irish Society" of the future management of this property. The whole system by which these Irish estates are held and managed by a number of London traders is altogether indefensible, and equally indefensible is the management that distinguishes the City Companies in respect to their English trusts. Had the London City Companies taken the advice given to them a dozen of years, or even seven years since, they might have been in a more secure position, and occupied a more honoured place than they do at present. These City Guilds would not move, and were insolently impatient of all criticism. Feeling the ground slipping from under their feet, they now, in a few instances, show signs of taking a little reasonable advice; but they are choosing their own way of reforming themselves, and we need not anticipate how far it will fall short of public requirements.

It may be asked, What have we in Dublin to do with the conduct of a number of London bodies? We have this concern, that whatever tends to the benefit of education, art, and skilled handicraft in London will also tend to improvement here. There are large bodies of our countrymen of the first and second generation in London, and their children engaged in art and handicraft pursuits will benefit under a wise administration of the trusts of the London City Companies. We have numbers of English and Scotch parents in Dublin, and their children participate, whenever inclined, in whatever educational and art facilities the institutions of this city can put in their way.

Apart from this narrow issue, education, art, science, and skilled handicraft are or ought to be universal in aims and purposes. A technically-educated and skilled British artisan is not a local operative, but a cosmopolitan one who need not fear to travel anywhere, though as a thoroughly skilled handicraftsman we would prefer keeping him within the circuit of the three kingdoms. Let us then by all means have a reform of these London City Guilds and other close corporations, and let these and other edu-

cational trusts and endowments be directed into their proper channel for the common weal, and not, as heretofore, for the benefit of individuals and classes who have little or no claim upon them.

Since the above article was in type, a brief report of a paper on "The Decay of City Guilds," read at a meeting of the Social Science Association in London, by Mr. A. Smith, has reached us. We give a short extract:—

"Mr. Smith said that originally the guilds were purely trade societies, giving, it was true, occasional pageants and feasts, but always accomplishing useful duties. Now, however, they could not claim to represent or seriously benefit commerce. They no longer suppressed adulteration or fought against "shoddy" manufactures; they rendered but little service, and feasted all the more. Yet their wealth had increased in a fabulous manner. The 89 companies enjoyed between them at least £1,000,000 per annum; and of this sum only about a tenth part was under the control of the Charity Commissioners. What was done with the remaining £900,000 income? This wealth, derived in a great measure from the unearned increment accruing from landed property, was daily increasing. On the expiration of a lease the Cordwainers' Company, for instance, had but recently increased one of their yearly rentals from £250 to £500. With one or two exceptions, this wealth was held by secret, self-selected bodies, who had nothing whatever to do with the special trades to which the legateses had left their property. These managing committees or courts were absolute masters of the situation. They studiously excluded from their mystic circle all who had not been well sounded and on whose discretion they might rely. They refused information, shunned the light of criticism, and, in some instances, would not even answer the questions of the Parliamentary Commissioners; hence the inadequate character of the Parliamentary report of 1837. Mr. Adolphe Smith then proceeded to relate the results of his personal inquiries concerning the manner in which all courts disposed of the funds they were supposed to administer for the public good, or at least for the good of their trade."

#### HUMANE SANITATION.

There are smells in each Court!—

So a Q.C. complains.

Sure the rats must disport

As they scavenge our drains!

But the Chief Baron notes

That the Board of Works got

A forewarning (he quotes),

But respected it not!

Board of Works Architect,

Come in haste, though unkempt;

To the Four Courts direct

Rush, and purge your contempt;

Bring your staff by all means,

With carbolic in vats.

Kill the stench in the drains,

But don't murder the rats!

KIR.

#### CONVENT OF MERCY, DOWNPATRICK.

THE subject of our illustration with present No. is the Convent of Mercy lately erected at Mount St. Patrick, Downpatrick. The material used is the local blue stone in rubble masonry, faced with Belfast perforated red bricks. The dressings are of white Scrabo stone, with black bricks in external relieving arches. The design is in the Gothic style of architecture, and, together with the new schools attached, form a large and imposing group.

Mr. John Murphy, of Belfast, was the builder of the convent, and Messrs. P. and M. Nolan, Belfast, builders of the schools. Mr. S. M'Mullan acted as clerk of works. The buildings were erected from the designs and under the superintendence of Mr. Mortimer H. Thompson, architect, Belfast. The cost has been a little over £6,000; a portion of this sum was a legacy bequeathed by the

late Mr. John M'Ilherron, of Downpatrick, the remainder being raised by the Sisters of the Community, assisted by the Very Rev. P. O'Kane, P.P., whose parishioners are not only indebted to Father O'Kane for this, but also for the erection of the handsome church adjoining the convent. This church, grouping as it does with the convent and school buildings, forms on Mount St. Patrick a picturesque and fitting crown.

#### "THE ANTIQUITY OF MAN."

ON Monday afternoon the first of a series of eight lectures was delivered in the Theatre of the Royal Dublin Society, by Professor T. Rupert Jones, F.R.S., F.G.S., &c. The subject was "The Antiquity of Man." The lecturer commenced by observing that in the substructure of every city evidence was found of the existence of the ancient inhabitants of the place, and of the circumstances under which they had lived. This was especially seen by the excavations and explorations which had been made in Babylonia and Syria, where, beneath the ruins of some village, are found the crumbling remains of palaces and temples, which were themselves, probably, built of materials once belonging to some more ancient structures, of which no account remains, and of which no traces are extant except unconnected stones and scattered debris. Under this, at length, is reached the gravel collected by the Euphrates and Tigris. In other countries similar results have been effected by excavations, and in London not only have the ashes of the fire which caused such devastation in the reign of Charles II. been found forming a distinct line between the modern and the more ancient remains, but also traces of the fire of Boadicea's time have been discovered. Some twenty-five years ago, on the gravelly soil on which St. Paul's Church is built, were found ruins of the wattle huts once the dwelling-places of the Picts, and in various parts of Ireland and France numerous discoveries of the bones, teeth, &c., of extinct animals, and the weapons and tools anciently employed by the natives of those countries have been made. Some of the animals, however, such as the reindeer, which can no longer be found in this country, still exist in Lapland or other lands possessing an extremely low temperature, and this fact forms one of the proofs that Ireland must have had a climate equal in intensity of cold to that of the Arctic regions. The lecturer then gave a most interesting description of the different articles which lay before him on the table, and said that at a long distant period many countries had been submerged under the sea, and that then the peaks of Snowdon, the Wicklow Mountains, and the Mourne Mountains were merely snow-capped, forming a European ice-bound Archipelago. Subsequent to this, and after the lapse of many years, the land had risen to so great a height that tracts of country which are now covered by the sea—which, after all, was but an accident—were then valleys, watered by rivers, of which the rivers on the coast at the present time were mere tributary streams. Among these former valleys was ground over which now rolled the English Channel. The Professor then, referring to the different geological strata, said that in one are found fir trees, bones of animals, and stone implements; in another the remains of oak trees have replaced those of firs, and, instead of stone, bronze weapons and tools are discovered; while in a third decaying beech trees and implements made of iron take the place of the bronze and of the firs. From the length of time which it is calculated must have been occupied in the formation of these deposits man must have existed many thousand years longer than we are accustomed to think.

The second lecture will be on the 7th inst., by Professor Barrett, "On the Analogy of Light and Sound."



NOTES ON THE EARLY HISTORY OF  
THE IRISH STAGE.\*

IN giving some account of the lives and careers, along with a dramatic estimate of the abilities of a few of the principal native actors and actresses more intimately connected with the Irish Stage, we are obliged to anticipate events, as the close of their theatrical lives extends beyond the period to which our narrative will, under its present form, carry the reader.

Henry Mossop was the son of a respectable Irish clergyman, who resided for several years at his rectory at Tuam, in the County Galway. The father sent his son Henry to a brother, who was a bookseller in Dublin, and through the latter he was, after some time, put under the care of a Mr. Butler, the principal of a grammar school in Fade-street. Here young Mossop remained five years, and, when sufficiently prepared, entered the Dublin University. He passed through Trinity College with credit, and, after taking his degree, passed over to London under a promise from his uncle to provide for him. The reception that he met with did not at all square with his sanguine expectations; and as his prospects did not appear to his youthful mind to be of a brilliant kind, young Mossop's proclivities led him to try the stage, for of theatricals he was an admirer when in Dublin. After applying to Garrick and Rich, and affording both a specimen of his abilities, he was pronounced by each totally unfit for the stage. Here was a disheartening rebuff on the threshold! but it seems not to have at all unnerved young Mossop, who, like other and greater men in modern times who failed in their first essays, resolved despite failure to conquer fortune by perseverance.

Slighted and rejected by Rich and Garrick, we find Mossop next applying to a friend and schoolfellow for an introduction to Sheridan. Through the good offices of his schoolfellow and brother actor, Francis Gentleman, the kindly Sheridan gave Mossop an invitation to come over from London, and moreover gave him his choice of parts. As we have already seen, Mossop selected for his first public appearance the character of Zanga in the "Revenge." On the night of his *debut* the pit of old Smock-alley Theatre was crowded with his former brother collegians from the University, who gave their fellow-student an enthusiastic reception. Despite a certain wildness of speech and awkwardness of action, Mossop's first representation was the herald of his future success as an actor. Throughout his after theatrical career a degree of awkwardness in acting clung to him, although his great and undoubted abilities overrode all his defects.

Various have been the dramatic estimates drawn by natives and outsiders of Mossop's talents, and, as impartial chroniclers, we shall allow all whose opinions are worthy of being known have their fair say upon the matter.

C. Dibdin, who wrote a "History of the Stage," thus writes:—"Mossop, from all I can collect, was a commanding but never an agreeable actor. There are various ways of convincing the mind. We are convinced by subtlety, by plausibility, by blandishment, and by eloquence; but we can also be convinced by perseverance, by confidence, by earnestness, and even by vehemence. These latter qualities seem to have been Mossop's mode of convincing his audience with an admiration of him, which, with all his pomp, his stiffness, his peculiarity, and his affectation, he contrived to bring about. I have heard Mossop praised for great and commanding powers in tragedy, such as no other actor ever possessed; and it has been insisted that, if he was quaint and starched at times, he was at other times grand and energetic, and indeed his influence over the feelings of his audience was irresistible. Tho mind, however, is not fond of being threatened into pleasure, nor are those confessions very sincere that are effected by compulsion. We

cannot, therefore, reasonably acquiesce in the opinions of either the admirers or disciples of Mossop."

John O'Keefe, in his "Recollections," thus speaks of his countryman:—"Mossop was so correct and particular that in the parts he studied (one of which I saw and heard) he had marked in the margin even the expression of his face, the raising and lowering of an eyebrow, and the projection of an under lip. In his acting he had a certain distinct spot upon the stage for almost every speech," &c.

Tate Wilkinson observes of Mossop:—"His port was majestic and commanding, his voice strong and articulate, and audible in a whisper, and a fine, speaking, dark hazel eye."

Davies thus estimates our native actor:—"Mr. Mossop was an actor of so established a reputation and of such eminent merit, that his history and misfortunes deserve to be recorded. . . . Notwithstanding he was utterly void of grace in deportment and dignity in action, that he was awkward in his whole behaviour, and hard sometimes in his expression, I observed he was in degree of stage excellence the third actor—a Garrick and a Barry only were his superiors; in parts of vehemence and rage he was almost unequalled, and in sentimental gravity, from the power of his voice and the justness of his conceptions, he was a commanding speaker. It is not to be wondered that Mossop wished to act the lover and the hero. To aim at general excellence is laudable, but repeated unsuccessful trials could not convince him that he was utterly unfit for tenderness or joy, for gaiety or vivacity. . . . He was always best where he could conceal by the disguise of age or dress his shambling walk and his ungainly action."

Mr. Percy Fitzgerald, one of our living writers, thus portrays Mossop:—"An iron-throated tragedian. He was a man of education—reared in Trinity College, Dublin, which had thus turned out no less than four first-class tragedians; gifted with a strong and unmelodious declamation, and with a physical strength that would have carried him through such parts as Sir Giles or Richard. But his action was singularly ungraceful, and in the more level passages fell into the wearying monotony which was the curse of old stage declamation."

Churchill, who cleverly though very sarcastically, and sometimes unjustly, sang the praises and follies, the vices and virtues, of a host of actors and actresses, thus depicts his countryman:—

"In studied impropriety of speech,  
He soars beyond the hackney'd critic's reach;  
To epithets attach emphatic state,  
Whilst principles, ungrac'd, like lacqueys wait.  
In ways first trodden by himself excels,  
And stands alone in undecidable  
Conjunction, preposition, adverb join,  
To stamp new vigour on the nervous line.  
In monosyllables his thunders roll—  
He, she, it, we, ye, they, fright the soul."

In the volume of *Blackwood's Magazine* for 1841 there is an interesting notice of Henry Mossop, which, while treating of this remarkable actor, embodies other information of an interesting kind worth quoting in connection with the Irish Stage during his time. The writer says:—"While Garrick's sun was verging to its decline, Mossop came before the public with extraordinary promise. He had been educated at the Irish University, and intended for the Church, but Garrick was his tempter [but certainly not his personal encourager]. He had seen this memorable actor on the Irish stage, and thenceforth determined to be an actor or nothing. His first appearance was in Zanga. His talents in that part surprised everyone, and he was eminent at once; but with striking abilities he had the great drawback of an irritable temper. He quarrelled with mankind, beginning with the manager. He soon after left Ireland, and made his first step on the London boards in 'Richard III.' His style of acting seems strongly to have resembled that of Kean in the present day—singularly vivid, subtle, and forcible, but with the de-

fects of abruptness of delivery and irregularity of performance. He had another grand imperfection—that of believing that his talents were as unlimited as his ambition. He grasped all the leading characters without discrimination, and of course played many of them without effect. Quitting Drury-lane in high displeasure, he returned to Ireland. There was but another step to ruin, and he took it without delay. Influenced with the mania of management, he declared 'there should be but one theatre in Ireland, and that he would be at the head of it.' A declaration of this kind was a declaration of war with the theatrical world. Mossop found himself wrapped in universal hostility. He began his career with flying colours, disdained to listen to an offer of £1,000 a-year to remain with Barry and Woodward, and rushed headlong into ruin. After seven years [a pretty long campaign!] of hopeless toil, he became bankrupt, abandoned Ireland, and returned to England. His health sank rapidly; he roved about with a drooping countenance and a worn-out frame, answering every inquiry for his health by saying 'that he was better,' and every inquiry into the state of his finances by saying 'that he wanted nothing.' If his life had been prolonged, he would probably have lived a lunatic; but he was suddenly found dead in his bed, with only fourpence in his possession."

Much of the above short epitome of the life of Henry Mossop is, no doubt, true; but, despite of what has been written, the traits of his strong will, iron resolution, independent spirit, and remarkable talents stand out clearly. His ambition to rule the Irish Stage was a laudable one, and it was the ambition of a Sheridan and others of his countrymen, predecessors and successors. No doubt he possessed his share of vanity; but all great actors, and many minor ones too, have not been free of it. If men will not endeavour to elevate themselves, it is seldom that their brethren in the same profession will lift them up, or give way to their own displacement.

It cannot be denied that in the theatrical profession there are always fierce jealousies rife, and sometimes the stronger or more brilliant goes to the wall, and not seldom does the man of mediocre ability rise for a time and succeed as a successful manager where he would fail as a successful actor. Henry Mossop was, to be sure, guilty of follies, but if a proper estimate is to be formed of his life, character, and dramatic talents, he must be judged in connection with the times in which he lived, and various influences in the theatrical world that encompassed him for good or ill.

In comparing the powers of Barry with Mossop, the author of a "View of the Irish Stage" thus gives his dramatic estimate of the latter:—"With very opposite powers, yet with such dramatic abilities as fell to the lot of very few, Mr. Mossop next claims our attention. Never was there a greater contrast than between those heroes; never were two performers better calculated by nature to shine together, to reflect lustre on each other's performances, and support the opposite characters in tragedy. I may not, perhaps, be seconded in my opinion, but I cannot help considering Mr. Mossop not only as an original but as a singular actor; nor do I recollect in the long list of capital performers who preceded him, or whom we have since seen, one to whom he could be strictly compared. Mr. Mossop possessed an agreeable person; he was of middle size, well made; his action at this time much improved and with great propriety suited to the situation of the scene, his countenance uncommonly marking and expressive, his eye piercing and big with what his mind contained. But what eminently distinguished him from all his contemporaries was the excellence of his voice. It had the peculiarity of tone equally distinguishing as Mr. Barry's, though in every respect opposite; it was, perhaps, as fine, full-toned, articulate, and solemnly impressive as any actor's that ever trod the stage; possessed of unusual compass, it was admirably adapted by its cadence to display the great, the grand,

\* See ante.



and the sublime in tragedy; it conveyed equally distinct the loudest effusions of rage which the warmth of passion required, and the most solemn sentences of the deepest declamation."

Now this is a picture drawn by a man who was a contemporary of Messop, and who was an actor, a dramatic author, and for several years a prompter and deputy manager of one of the principal Dublin theatres. Hitchcock, who wrote as above quoted in his "View of the Irish Stage," is certainly entitled to be heard, and there is less reason to accuse him of partiality to Irish actors, as we believe he was of English birth. Before his settlement in this city Hitchcock was a performer on the York stage, and subsequently prompted at the Haymarket, London. In his "View" he further adds of Messop:—"There were, I believe, many instances where he more forcibly struck his auditors by the energy, spirit, and fire of his tones than they ever experienced from any other performer. In the great and terrible he rose beyond idea. There were many passages of his Zanga, Coriolanus, Bajazet, Virginia, and Richard which astonished, and were superior to the boldest conception formed of these characters. . . . . To the parts above mentioned I may add his Duke in "Measure for Measure," which was truly a capital piece of acting; his King John, Ventidius, Chameut, Zampiti, Achmet in Barbarossa, Cato, Macbeth, Hotspur, Osman in Zara, Horatio, Shore, Wolsey, Iago, Prospero, and many others."

The actor who could personate the above characters, and could personate many of them well, must have had command of varied powers. The estimates of several English critics differ widely in some respects from those drawn by Hitchcock. Sheridan, Barry, Mossop, West, Digges, Woodward, Garrick, Macklin, Foot, and others were witnessed in their meridian by Hitchcock, and he had ample opportunities of forming a true estimate of their abilities in various characters.

On the whole, we do not think that the dramatic picture of Mossop, as painted by Hitchcock, is in any sense an exaggerated one; and when the "View of the Irish Stage" was published (1788-94) there were hundreds of persons alive in this city who confirmed the truth of the picture drawn by Hitchcock. No doubt a style of acting adopted by particular actors in some instances will not afford the same pleasure in another country. One thing is certain, however, that Henry Messop generally gave satisfaction to his Dublin audiences.

#### RAILWAY WASTES AND RECLAMATION.\*

THE construction of a railway, as a matter of necessity, diminishes the area of arable land of a country, and the total so appropriated for railway purposes in these islands has annihilated the food production of many thousands of persons. This loss is, however, more than compensated by increased production and better means of distribution for the country at large. Thus the railway has enabled lime, coprolites, and other fertilisers to be distributed over a far wider area than was done by horse or water transport. It has also enabled town manure to be carried to the fields, but not to the extent that might have been effected by a judicious supervision of the Legislature. The railway has greatly contributed to the economical distribution of imported substances, such as guano and bones. Another mode in which railways have increased the supply of food, has been by the conveyance of fat cattle or their carcasses to market, instead of their being driven by road, at an enormous loss of the meat which had been previously produced. The conveyance of lean stock to feeding grounds is another useful function of railways. So, too, the conveyance of harvest labourers in the evening from place to place, without waste of their strength, is a great economy of power. The supply of coal for agricultural

engines has done more than anything to promote the increase of these instruments of productive power throughout both islands. As the railways also distribute great quantities of fish and other articles of food to the remotest places, they add to the supply of the population, and compensate for the displacement of land from tillage or pasture. Nevertheless, it is a matter of great importance that there should be no wasteful occupation of land even for railways, and wherever the course of the line or the supply of material can be directed over barren land, this should be provided for by the care of the community. It is scarcely necessary to say that there is no such care and no such supervision, and that a railway engineer or contractor is allowed needlessly to spoil land or soil. For that matter so is anyone else, and so to diminish the national resources.

Holland alone has looked to the economy of her soil, and the provision of new soil by reclamation from lake or sea. In England and Ireland there is no such thought, and reclamation of commons or reclamation of shore is left to what is called private enterprise and hap-hazard action.

Forty years ago I computed that 60,000 acres of sea could be converted into good land on our north-west coast, but we were embarrassed by the Crown instead of assisted. In the case of my plan for the construction of the railway in Morecambe Bay, the Crown fought against us, and against itself in its twofold capacity of Crown claimant, and of Duchy of Lancaster claimant, to the lands we should have recovered. In the end, those who carried out the works only succeeded in obtaining a small area in Morecambe Bay, the Duddon and the Solway—but which is still a permanent addition to the wealth of the country. On the present occasion, although I refer to this subject of the extension of our national resources, I wish to urge the stoppage of waste of existing means in advance of the measures for extension which should certainly be kept in view.

In passing along any railway we can see square ponds, or tanks. In most cases these will be recognised as rank marshes, and in some instances such a marsh is established alongside the station-village, founded by the railway company or its group of workmen's cottages. Thus we find two evils in operation at once—a destruction of food-producing surface, and the institution of nuisances for lowering the vital energies of the people and for promoting disease. Good examples may be found in populous neighbourhoods in low-lying ground, in such places as Battersea, publicly illustrating our course of sanitary administration. In the aggregate, these little malarious tanks constitute a considerable extent of swamp, and, unless prevented, their construction will proceed, and the amount of mischief will become still more appreciable. This mischief and this nuisance is, in general, without necessity and without excuse. At an early period of engineering, when it was not quite so easy to take land from proprietors, the cuttings and embankments were made to balance each other, and the stuff for the cuttings was brought from a distance. Contractors at length found out that if they were allowed to make up an embankment more or less from side-cutting, it effected a large saving to them in the lead or transport of material. A collateral result is that the stuff from a cutting is also deposited in a spoil-bank on other land, which is wasted, and not restored to cultivation. This, however, is not so great an evil as the other.

What we want is a minister who will look after the national resources. Many a Spanish republic has such under the name of a Minister of Fromento. We have not even a Minister of Agriculture; and that anomalous department, the Board of Trade, has no adequate organisation in reference to the national wants. If, however, nothing better can be done, the Railway Department of the Board of Trade should be charged to ascertain the extent of the present evils, and to devise measures for their cure or prevention.

In making the present remarks, it is not necessary for me to suggest how or in what way the corporations who have created the mischief should be set to redress it. It is enough to point out that on the railways there is coarse soil to fill up the excavations, good soil to cover it with a cultivable top, and the mechanical power for its conveyance. There are many of these small preserves of malaria which could be filled up for a few pounds. It is a very common practice to take side-cuttings from a small depth, and that is the cheaper, leaving 3 ft. or 4 ft. only of excavation and for water gathering. In some cases the side-cutting could be drained under the line to the other side.

Such is a simple reference to common facts, open to everyone's inspection, but receiving very little attention. On further consideration, it will be found that the railways, besides distributed fertilisers, are capable of materially improving the soil of various districts, and of contributing much more than they even now do to the national advancement and prosperity.

#### ADVERSARIA HIBERNICA.

##### LITERARY AND TECHNICAL.

THE ancient church of St. Audoen, or Owen, in High-street, situated in a narrow passage leading from the old Corn Market to Cock-street, has been more than once described as one of the most remarkable structures that we possess, and as the only remaining Gothic edifice in Dublin. Without stopping to endorse this statement *in toto*, we will hasten on to give some particulars in connection with the history and reparations of this structure, for in relation with its architecture and sepulchral monuments there is much to interest the general as well as the architectural and antiquarian reader.

In Wright's "Historical Guide to Ancient and Modern Dublin," 1821, which is illustrated after drawings by the late George Petrie, there is a description of this church and some of its principal monuments. In this work it is stated that as early as 1316, when Edward Bruce, brother of the king of Scotland, invaded Ireland, and was approaching Dublin, the citizens destroyed the monastery of St. Saviour's, which was on the north side of the river, to procure materials for extending the city walls, from St. Owen's to the quay; and at that time this church was 400 ft. from the bank of the river. And so early as 1213, Henry de Londres, archbishop of Dublin, is mentioned as having by charter appropriated this church to the treasurer of St. Patrick's; and in 1181, John Comyn gave this church to the Convent of Grace Dieu. In 1467 it was erected into a distinct prebend by Archbishop Tregury.

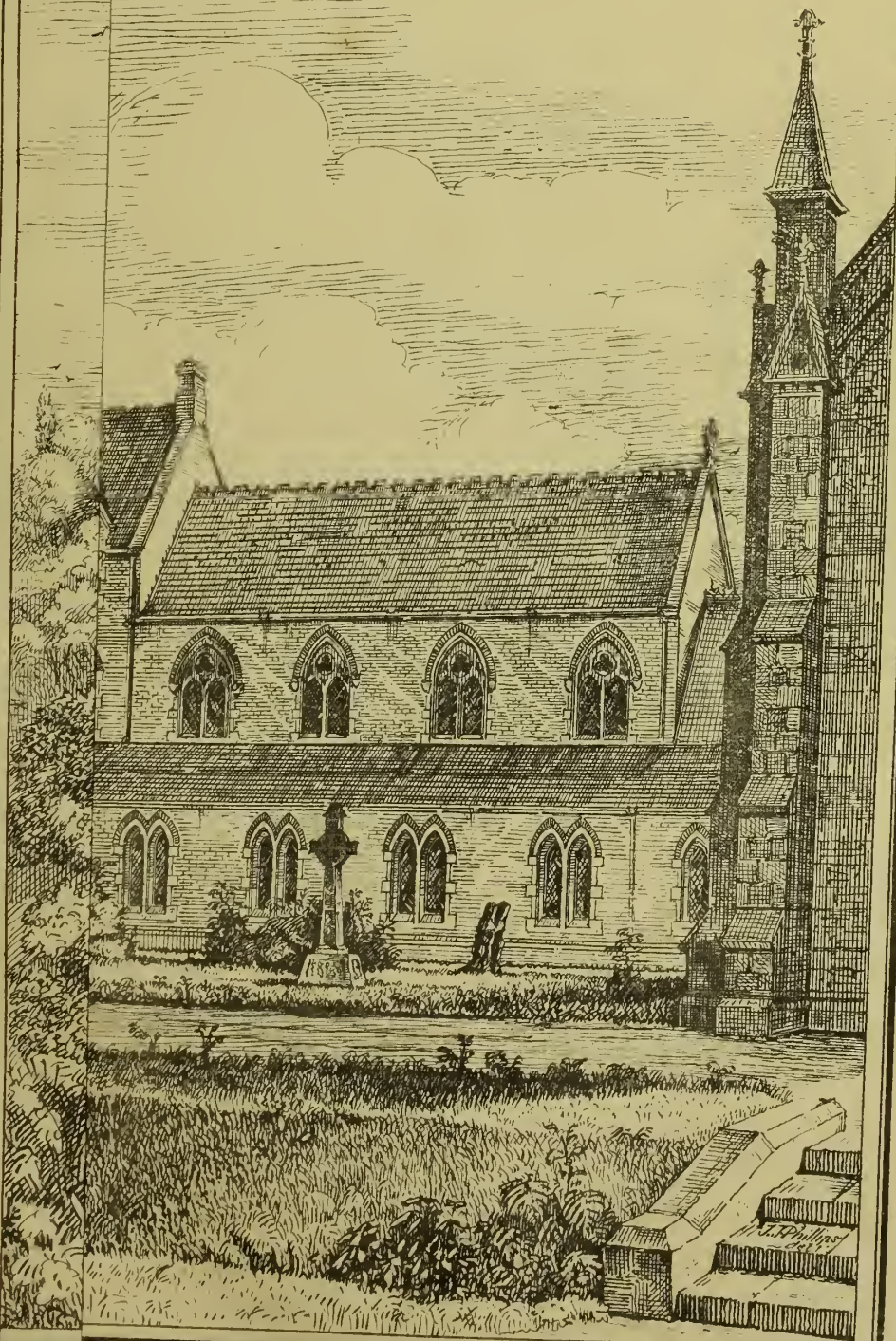
As existing in its original perfect state, the church consisted of the choir and one aisle parallel to the choir, and of equal length, built by Lord Pertlester. At the end of this aisle was the steeple, with a peal of bells. As described in 1121, the church was only the western end of the ancient one, and about three-fourths of the old building were a complete ruin. The eastern extremity of the choir still exhibited a fine specimen of the pointed style of architecture, and showing three arches of light and elegant construction. On one side of the pillars from which the arches spring was a tablet, the inscription of which was not very decipherable, erected to the memory of a female of the St. Leger family, whose effigy, placed at full length, was to be seen at the foot of the pillar.

Passing over several interesting monuments, we come to the principal one at the south side of the eastern window, which represents a knight in armour, and his lady, with their dogs at their feet. The figures were remarkably perfect. This tomb was erected by Rowland Fitz-Eustace, Baron Pertlester, A.D. 1455, and it is placed in the aisle, which he built at his own expense. On

\* By Mr. Hyde Clarke. Read before Society of Arts.

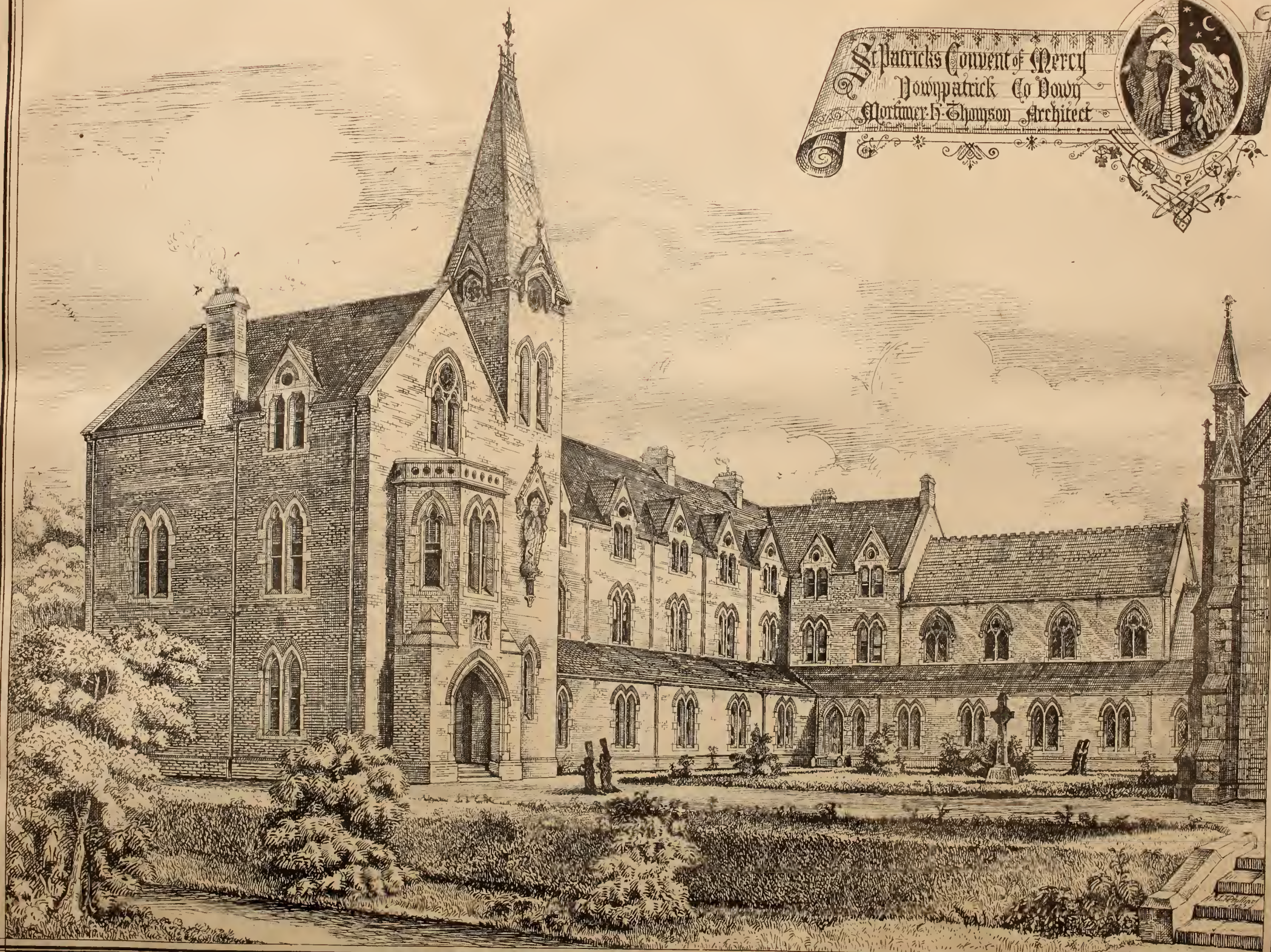


Patrick's Convent of Mercy  
 Downpatrick Co Down  
 James H. Thompson Architect





St. Patrick's Convent of Mercy  
Downpatrick Co. Down  
Mortimer H. Thompson Architect



View in the Cloister-Garth



the margin of the tomb is the following inscription in Gothic characters:—

"Orate pro anima Rolandi Fitz-Eustace de Portlester, qui hunc locum sive capellam dedit, in honorem beate Mariæ Virginis, etiam pro anima Margaretæ uxoris suæ et pro animabus omnium fidelium defunctorum."

Now one thing remarkable in connection with the monument is, that its duplicate exists at New Abbey, County Kildare, where Lord Portlester was buried in 1496. The title is long since extinct.

In the April number of the *Anthologia Hibernica* for 1794 there is an engraving of the Eustace monument, drawn by W. B. (William Beauford), and the plate was engraved by Samuel Clayton, the father of Benjamin Clayton, the engraver of several of the illustrations in the old *Dublin Penny Journal*. The descriptive article in the *Anthologia* is signed B., and no doubt was written by Beauford, who was one of the antiquaries associated with Ledwich in the conduct of the *Anthologia* after their secession from Vallancey, with whom they were previously associated in his *Collectanea de Rebus Hibernicis*. Beauford's drawing represents the monument as it stood in New Abbey up till 1786, when it was destroyed, with a greater part of the ruins, in order, as he says, to build a Roman Catholic chapel with the stones.

As the monument at New Abbey was a counterpart of that at St. Audoen's, Dublin, Beauford's description of its art characteristics will not be out of place, as it will afford an illustration of the state of monumental sculpture in this country in the fifteenth century; but whether the work was performed by an Irish or an English artist, we are unable to say. Beauford writes:—"On the tomb, in alto-relievo, are the effigies of Sir Rowland Eustace, Baron of Portlester, and his lady Margaret Jenico. Sir Rowland, who was the founder of New Abbey in the year 1460, is clothed in armour according to the custom of the times. Lady Eustace is in the fashionable English dress of her age. On her head she wears the cap called a coronet, bound by a fillet or frontlet of gold or silver lace, wrought with the needle in no elegant pattern. This fillet is tied behind, from which depend long lappets, or rather a kind of veil, which occasionally could be drawn over. On her bosom is a cross of pearls. Her gown is of that species called kirtle, made to fit close, with rohings, and, as pins were not then in use, made fast by a girdle studded with pearl roses. The skirts are plaited in large and thick folds, and trimmed with a flounce. Her shoes are neat and in the present fashion. Here observe that the kirtle was an English, not an Irish habit, nor did the original Irish ever wear it, though the English settlers constantly did. The Irish ladies wore the gunna or gown, which was a long loose robe without sleeves, as represented on O'Connor's monument [see *Anth. Hib.*, vol. i. p. 245] are frequently closed by a girdle. Round the figures on the outer edge of the tomb was engraven in relief, in that species of Gothic characters called Church text, the following inscription:—

"Orate pro anima Rolandi Fitz-Eustace de Portlester qui hoc mo: construxit et fundavit, et qui ob die Decemb. 19 A.D. 1496; etiam pro anima Margaretæ uxoris suæ."

It is worth comparing this inscription with the one previously given.

Beauford continues his description:—"The time of the decease of the lady is not given, as this part of the inscription is much defaced. On the front of the sarcophagus are three figures in bas-relief; that in the middle represents a keener clothed in Irish habit, on her forehead she wears the cabhin or keeveen, and on her neck and shoulders the shawl or clodhach, her petticoat is also flounced; but she has neither a bodice nor kirtle; over all, even her head, she wears the Irish fallany or mantle called also the bratlin or Connaught cloak. The other figures represent two heralds in the crown, sword, tunic, and cloak, of their office, and also on their heads, under the crown, the long veil or coif, usually worn at funerals. There were some other figures on the opposite side, most of which were defaced except

that of a monk in the habit of his order. The sacrilegious hands which destroyed this monument were not content with removing the stones which composed it, but also scattered the bones of the founder in various places. *Sic transit gloria mundi.*"

The rest of the article is a description of the family of Fitz-Eustace, their settlement in Ireland and various possessions, their noted mansion at Harristown, down to the last living representative of the house, who, at the close of the last century, was a poor, infirm, and aged man, living almost unnoticed. The great family died out with their many titles and honours, and Harristown, one of the most beautiful seats in the kingdom, and a place of great resort, with its gardens, shady lawns, terraces, lakes, woods, vanished into corn fields. John Latouche, at the close of the last century, was the proprietor of the once famous estate.

*Apropos*, there yet remain matters of interest to be described in connection with the Church of St. Audoen, its ruin and several reparations or alterations, for we cannot call the work "restorations." Thomas Bell, in his treatise on the "Gothic Architecture of Ireland," published in 1829, was of opinion that St. Audoen's originally consisted of a very extensive pile of buildings, which was divided in the centre by a range of light pointed arches, and their piers, extending from west to east, the arches appearing of an equilateral shape and of regular uniform size. The mouldings, even when he examined them, bore evidence of very good workmanship, and the heads or capitals of the octagonal piers, composed of mouldings nearly circular.

Here are Bell's own words as to the reparations:—"Many years ago, the church being considered much larger than was necessary for the accommodation of the parish, the eastern or chancel end was divided from the body of the church by a wall and window screen crossing it nearly in the centre. An inscription sets forth that the church was repaired and beautified, and that this new chancel was erected at the expense of the parish in 1773. This new chancel was nothing more than a tasteless range of ill-proportioned Corinthian columns and cornices stuck round with little urns, in very bad taste, and painted or rather daubed over, with cherubins' heads in a style more despicable. Previous to this alteration, or as the inscription affects to call it, this "beautifying," the communion service used to be celebrated in the original chancel, to which the communicants had to retire. It thus formed a kind of appendage to the church something resembling the lady chapels of our old cathedrals."

This classic Vandalism was, no doubt, in 1773 thought to be something akin to Madame Rachel's process of making "beautiful for ever" whatever it touched. Bell informs us next that "In the year 1820 a further alteration was commenced. The gallery which occupied the Pointed arches over the back aisle (as I call the southern longitudinal division) was completely removed, the arches and the centre space between the piers were built up, and that part unroofed. The original chancel was also unroofed at the same time, thus converting three-fourths of the structure into a pile of ruins. The improvements thus introduced by rebuilding and repairing have consequently limited the body of the church to one-fourth of its original dimensions." These beautiful alterations were finished in 1821, and, as a consequence, up went another inscription informing the public of the date of that master-stroke of stupid and reprehensible piece of Vandalism.

In 1826 came another alteration, according to Bell, but this time there was a little judicious care exhibited, and what was done evidenced some Gothic feeling, as the Gothic Revival was then budding into life through the examples Francis Johnston had presented in some of his works, but particularly in the Castle Chapel, some years before. The alterations of 1826 consisted in removing the old

slated spire of the church, and raising in its stead on the tower, pinnacles and battlements, the octagonal spirelets of the former being made of cast iron. The arched doorway and windows of the steeple were also improved in accordance with the rather *jejuné* Gothic spirit of the time. We might have added that the steeple of St. Audoen's which was removed was rebuilt in 1670, the former one having been blown down in 1688. The alterations of 1826 were executed under the superintendence of Henry Aaron Baker, architect, R.H.A. This gentleman, we believe, succeeded, after the resignation of James Gandon through increasing age to the conduct of some of the business and works previously under the charge of that great architect.

There is a lithographic drawing in Bell's work of the ruins of St. Audoen's Church, drawn "on stone by J. J. Mulvany," and "printed by C. Hullmandel"; but the majority of the illustrations in that work were drawn on stone by Bell himself, and printed by the aforesaid Hullmandel. As specimens of lithography they are poor; but the art at the time was, at its best, far from the degree of perfection it reached in after years. In "Dublin Delineated," 1837, there is a very good view of the ruins of Lord Portlester's Chapel, drawn by the late George Petrie, and engraved by B. Winkles. The plate is inscribed to the late Sir William Betham, the antiquary and Ulster King at Arms.

Bell says St. Audoen's Church was originally founded by the Danes or Danish Irish of Dublin; and Wright, failing other authorities, like the former, says the church, it is supposed, was built by the Normans. The saint to whom the edifice was dedicated was, we are told, Archbishop of Rouen in the ninth or tenth century, and died at Cleichy in France. His body was carried to St. Peter's at Rouen (since called St. Audoen's) and there interred. The history, associations, and surroundings of the ecclesiastical structure in High-street are full of interest, and we hope that our historical epitome may help in awaking a fresh spirit and further interest among our citizens for the conservation of our ancient city churches. H.

## ROYAL GEOLOGICAL SOCIETY OF IRELAND.

A GENERAL meeting of this society was held on Wednesday, 10th ult., in the Theatre of the Royal Dublin Society.

SIR ROBERT KANE presided.

Professor Hull, F.R.S., made a short statement on a letter from Professor A. Von Lasaul, of Breslau, as to the discovery by him of Tridymite, in the Trachyte Porphyry of Antrim, and a statement on a paper by Mr. A. Wynne, F.G.S., "On the Shells discovered in the Drift Gravels Moate, by Mr. Mallett, F.R.S."

Professor E. Reynolds next read extracts from a paper by Mr. G. H. Kinahan, M.R.I.A. (in the absence of the author), "On the Carboniferous Rocks of Ireland." Mr. Kinahan stated that various attempts had been made to correlate the carboniferous rocks of England and Ireland, but they had all failed. This was not to be wondered at, as any one who had a knowledge of the rocks of the two countries could scarcely fail to see that they must have accumulated under quite different circumstances, and that the Irish carboniferous rocks formed a distinct group. The recent deep sea researches of the Challenger seemed to throw light on the formation of the carboniferous rocks. They learned through them that in extremely deep water there are only argillaceous accumulations, and in shallow water calcareous. If it was allowable to draw a parallel between the carboniferous rocks and what they had learned from the Challenger researches, it might be suggested that the south-west Cork and Kerry rocks represented the deeper sea accumulations, the limestone of central Ireland and that where the calcareous deposits, though varying in thickness according to the depth of the sea, where the English coal measures, like those of South Staffordshire, were accumulating in swamps like those of Tropical Africa. If this suggestion were correct our Irish coal measures must be younger, or of the age of the highest measure in England.



In the short discussion which followed, Professor Hull dissented altogether from the statement that the coal measures of Ireland were newer than those of England. He did not think there was a shadow of reason for supposing it, but was of opinion that they could be correlated with remarkable precision, both by the position of the beds and the fossils they contained, and that they were strictly representative in time. He differed from the statement that there were higher beds in England than in Ireland, and he thought that probably when the author of the paper had an opportunity of reading the paper which he (Professor Hull) had brought before the society at its last meeting he would see reason for changing his opinion.

The Rev. Dr. Haughton said, as far as he was able to form an opinion on the subject, he was inclined to agree with Professor Hull, and he thought that the society should by no means commit itself to any opinion like that expressed in the paper.

### "PERSPECTIVES."

In noticing the paper recently read before the Architectural Association, London, by Mr. M. B. Adams, the *Athenæum* says:—

"The lecturer, commenting on the somewhat affected scorn of certain architects for perspective, or rather, to be more exact, 'perspectives,' says 'the modern French have neglected perspective, and their works are thin and flat as a result.' We question the *sequiter*, and doubt the cause. The flatness of modern French architecture is probably due to very different causes. It is undoubtedly true, however, that, 'that which looks well and suitable in one situation appears crude and lumpy in another; and, again, that which is admirable in geometrical elevation, may be very bad indeed in perspective.' The fact is that not even every architect has the power to read a geometrical drawing in a trustworthy way, and as to laymen, not one in ten thousand can do so. The error common in architectural practice, and especially in competitions, where a considerable proportion of the judges are laymen, lies in receiving 'perspectives' constructed from false and impossible points of view, so that they are neither more nor less than wilfully prepared means for deception. A 'perspective' ought only to be accepted when the standpoint is one of those which must occur when the building is in existence, and not only be a practicable one, but from an ordinary one, showing, for example, the proposed building as it would appear from 'Goswell-street over the way.'"

### BUILDING TRADES DISPUTES IN ENGLAND AND FRANCE.

DISPUTES in the building trades still continue in several towns in England. The masons at Durham seek an advance of 4s. per week, and in the same town the master builders have given notice to their joiners of reducing their wages, on the grounds of slackness of trade. The masons have at present 33s. per week.

At Leeds the master builders and masons have agreed to commence working by the hour system on and after the 1st May next, the pay being at the rate of 9d. per hour. The winter time-sheets are to be so arranged that the winter wages will not be less than 32s. per week. Artificial lights are to be used when necessary to allow the working hours in the time-sheets. All men employed as setters of stone to be paid 9½d. per hour when fixing, and the other workmen to remain as heretofore.

In Cornwall the condition of the locked-out china-clay labourers is stated to be desperate. The employers, as a condition of employment, demand the men to renounce their union, but the latter stoutly resist, and deputations are appointed to proceed to the north of England to solicit assistance from the various trade executives in aid of the men locked out.

Signs are not wanting indicating that in several branches of trade in England and Scotland as well as in the building trades disputes will be rife as the year advances.

Our contemporary the *Builder*, in an article on "Unionism in the French Building Trades," says that the various suggestions thrown out at the Workmen's Congress recently held in Paris have been promptly followed by move-

ments which will produce some effect in the building trades in France; and the *Builder* further remarks:—"At the congress all the speakers proclaimed the necessity of union, not for the sake of organising strikes, but to form benefit funds, to institute classes for technical instruction, to arbitrate in the matter of wages, to give legal counsel and support when required, to form co-operative stores, and, finally, to open co-operative workshops. Such, in a few words, is the programme of French trade unionism, and these projects receive active support from a great number of workmen attached to the building trades."

It will be seen from what we have stated above that capital and labour at home and abroad are mindful of their interests, and are preparing for a self-defence by words and acts.

### GRANITE BUILDING.

THE destructive and disagreeable effects (says the *Builder*) of the London atmosphere—charged as it is with acids and soot—upon stonework, have long been known and regretted. It would, therefore, be a great advantage if a more permanent method of external construction could be introduced; and charming indeed, if, instead of our miles of streets of lugubrious smoke-defiled façades, we could substitute some method of building that would give us freedom from decay, and permanent beauty and cleanliness.

We recently directed the attention of our readers to a few ancient and modern granite buildings, and a careful consideration of the favourable circumstances of the present day induces us to come to the conclusion that the use of granite is not only possible, but that it may help us out of a very unsatisfactory state of things. Notwithstanding our boasted science, we build to-day just as Sir C. Wren did, and though we see our buildings perish before our eyes, we introduce no improvement in their construction.

Not many years ago—before steam and machinery had been applied to building operations—it would have been a waste of time to suggest the propriety of facing our buildings with this hard, intractable, and durable material instead of soft stone. But what a change has taken place during the last forty years in economising labour by the aid of mechanical appliances which convert with wonderful facility the hardest or the softest materials to any form we desire, and bring them to our hands from distant parts at prices that would once have been thought inconceivably low! We think, then, that the circumstances of the day are altogether in favour of the suggestion we make. The attempt is worth making—nay, considering the scientific character of the age, and that, looking at the perishing state of our public buildings, somewhat of a stigma rests upon us, it is, we venture to think, absolutely incumbent, at least, upon the leaders of the profession to make it. They would then, perhaps, be able to show that the dreary hope of the second Royal Commission, after taking evidence on the decay of stone, recommended by the first Commission, "that some remedy would be found," had been realised. Of course it is only by the aid of machinery that it will be possible. As artists we may have a natural dislike of the use of mechanical power in art-work; yet, as practical men, we know that a rich architectural façade is full of detail that can, by its means, be done perfectly. Let us then endeavour to realise the character and details of a granite structure of the nineteenth century. As with the most costly marbles, the beauty of granite is not perceptible till it is polished. This is so far fortunate, for it is only a polished unabsorbent surface that will give permanent purity and cleanliness to any building in our smoky atmosphere, or that will secure it from the destructive acids discharged from certain manufactories. Experience shows that there is nothing disagreeable, as might be supposed, in the effect of large polished surfaces. The glare caused by refraction is only observable

when the sun's ray is at a certain angle, and this effect is so limited, both in area and time, as to render it a matter of no importance. On the other hand, in every other part of the façade we should have what artists term "depth of tone," an effect altogether pleasing.

Now, as the most polychromatic building ever erected in artificial materials can be rivalled in the various colours of granites,—black, from Castlewellsan in Ireland, and from Glee Hill dhu in Shropshire; white, from Kemnay in Scotland, and, though not so pure, from Cheesewring in Wales; red, from Peterhead, the Isle of Mull, and elsewhere; grey and blue, from several localities; and yellow, according to Dr. Borlase, from Cornwall,—general treatment is a mere question of architectural design which every artistic architect will be able to determine without a word from us. With one or other of these colours for the general surface, and two or more of the others used for the different orders of the jambs and arches, and for the several members of base-mouldings, strings, and cornices, but little moulded work and ornament slightly sunk below the general surface would be required to give perfect finish of detail to a building of the highest class. The ornament might be Arabic in principle, so that the limited proportion of ground left might, if particular richness were desired, be gilt. Properly done, we apprehend there would be no gaudiness of effect in this, but only a rich lustro in harmony with the general polished surface. In important edifices, figures in friezes, panels, and spondyls of permanent mosaic would take the place of the sooty statuary and bas-reliefs of stone buildings.

With these elements at command we cannot doubt that the application of this method of construction to our public buildings is well worthy of the serious consideration of architects. Indeed, after much consideration, it appears to us the only means of getting rid of what,—in this scientific age,—is almost a national disgrace, viz., the rapid decay of the external stonework of the public buildings of our cities.

It was but lately that we saw a forest of scaffolding about the Houses of Parliament, which may be said to have been only recently completed. Constant repairs are going on at the Abbey. Not an ancient stone exists of the Temple Church or Henry VII.'s Chapel. At the new front of Buckingham Palace the sentries were in danger from falling stones a year or two after it was built. And recently considerable repairs have been made.

As to the question of relative cost, railways and machinery have, during recent years, been gradually reducing both the prime cost of granite and the expense of working it. The steam sand-blast, for example,—recently explained in our pages,—would execute the kind of ornamentation spoken of above with extraordinary rapidity and precision; and, as is well known, polishing machinery is now in daily use. A rough estimate of the cost per square foot of the two fronts of the New Post-office,—rough that is as showing *minimum* cost,—gives 20s. Polished Aberdeen granite for ashlar, 6 in. thick, and with sufficient bond stones, can be delivered at London railway stations at 4s. 4d. per square foot, thus leaving the ample margin of 15s. 8d. for the other items of a granite façade, viz., cartage in London, scaffolding, ornamentation as above described, setting, and profit.

TREES FOR LONDON STREETS.—According to the experience of Mr. W. Paul, nurseryman, there are four trees which thrive better than others in towns; these are the plane (*platanus occidentalis*), the poplar (*populus monilifera*), the elm (*ulmus campestris*), and the gigantic stag's horn sumach (*ailanthus glandulosus*). The latter, though but little known, is a very beautiful tree, from the north of China, growing to the height of 50 ft., with large handsome pinnate leaves, which, on the young trees, are often a yard long. The lime (*tilla europæa*), when it will grow, is one of the best of town trees, because it may be pruned into any shape required without injury, and the flowers are very sweet.—*Builder*.



## ASPHALTE AND WOOD PAVEMENTS.

It would be well if our citizens and other correspondents asking us for our opinion upon the relative values of the above pavements would consult the report of Mr. Haywood, C.E., of the London Corporation. In his valuable report in 1874 to the Commissioners of Sewers he details all the practical knowledge that can as yet be safely given in respect to asphalte and wood pavements.

If we remember aright, we have already given the gist of his report, and his general conclusions upon the subject in regard to convenience, cleansing, construction and repair, safety, and as regards durability and cost. We quote his last conclusion:—"That wood pavements, with repairs, have in this city had a life varying from six to nineteen years, and that, with repairs, an average life of about ten years; that the durability of the asphalte is not known, but that, under the system of maintenance adopted, they may last as long as wood; that, contrasting the tenders for laying and maintaining for a term of years the two best pavements of their kind, wood will be the dearer."

Mr. Haywood is also of opinion that the smallest, neatest, cleanest, and most durable repairs can be made with asphalte; but that wood, while it lasts in a good condition, is safer for a horse to travel over, and shows less accidents from their falling upon it than the other. As a whole, Mr. Haywood's conclusions point to asphalte as preferable to wood pavement.

## THE STATUE TO BURNS.

THE unveiling of the bronze statue of Burns, the Scottish poet, took place at Glasgow on Thursday, 25th ult.—the 118th anniversary of the poet's death. Lord Houghton presided at the unveiling, delivering an appropriate address; and the day was one of great rejoicing and pageants on the part of the municipal, trades, and other bodies. The statue is erected in George's-square, and is the result of a movement and subscription got up in 1872, and principally contributed to by the workmen of the west of Scotland, the subscriptions being limited to the sum of one shilling from each subscriber. Scotchmen, however, in various parts of the world have contributed their mite. The statue is the work of Mr. George Ewing, sculptor, of Glasgow, who was invited by the committee in 1873 to submit a model. His design was adopted. The casting was executed by Messrs. Cox and Son, Thames Ditton, Surrey. There are four bas-reliefs, illustrative of some of Burns's writings, to be inserted on the pedestal, and to be supplied by the towns of Ayr, Kilmarnock, Paisley, and Greenock. The pedestal is of grey Aberdeen granite, and is simple and massive.

## LUNATIC ASYLUMS.\*

WITH regard to the general working of the Board of Control as established by the 11th & 19th Vic., c. 109, s. 5, and in which the inspectors participate, it may not be out of place to give a summary thereof, as it affected that portion of public lunatic institutions which came more immediately under our conjoint scope in the course of the past year.

The governors of the Armagh Asylum, coinciding finally in our recommendations urged on them for a very considerable period, agreed to an increased provision for 112 patients, with a chapel and new out-offices, the plans for which, prepared by their own architect, were approved of by us, and the sanction of the Lord Lieutenant obtained, as also for the purchase of twelve additional acres to the farm. The cost of the works and land has not been

as yet ascertained, but approximately speaking it may amount to between £12,000 and £13,000.

At Belfast hydrants for a full employment of water in case of fire have been adopted, with an enlargement of two day-rooms and a dormitory, on an estimated outlay of £1,600. There are, however, requirements connected with this institution which call for attention, notably—an increased and improved hospital provision, a chapel, and the efficient protection of land purchased some years ago, by a boundary wall at the town side.

The question of purchasing fifty acres of land for the Down Asylum was under the consideration of the Commissioners, but no definite action in regard to it has been as yet authorised by the executive.

At Cork the hospitals and adjoining airing courts authorised by Order in Council, July, 1873, were completed at a cost of £5,776; while the raising of portion of the boundary wall and means for securing a perfect water supply, were authorised in our report, at an estimated expense of £1,600.

At the Carlow Asylum farm-offices were completed and structural alterations and repairs in part of the old asylum in progress, under an Order in Council, at a probable cost of £2,000, making a total expenditure on the institution at large of about £23,000 since the new buildings were commenced in 1873.

At Clonmel, the formation of a connecting tunnelled passage between the two asylums, separated by a public road, and improvements connected with the laundries and out-offices were authorised by an Order in Council, at an estimated cost of £1,995.

At Ennis sheds for patients and farm purposes have been completed, at a cost of £364 7s. 6d.

At Killarney fresh provision for 100 patients, with new dining hall, under an Order in Council, was commenced, on plans prepared by our own architect, the estimated cost being £10,000.

The detached hospitals at Letterkenny have been finished, the outlay being £4,955 5s. 9d.

At Limerick additional accommodation for 100 patients with refectories and improved day rooms, in the old structure, as planned by the architect of the Commissioners, were commenced—on contract for £14,500.

The abandonment of the present asylum at Londonderry many years ago had been recommended by the inspectors to the Executive, and constantly urged by them on the local board. At the last summer assizes the governor and grand jurors of the district finally, and all but unanimously, acceded to the proposition, with the sanction of his Grace the Lord Lieutenant. The selection of a suitable site remains in abeyance, the citizens of Derry being anxious to have it near the town, while the great majority of the landed proprietors wish it in a more central position, and one of easier access for the benefit of the county at large. The provision in the new asylum being intended for at least 320 patients, the cost of erection, furniture, &c., with the purchase of land, will probably amount to £43,000, less the value of the existing structure, and the highly desirable ground for building purposes, eighteen acres belonging to it, worth perhaps a third of the sum named. The progress of the city seaward, or in its most useful direction, has been hitherto barred by the institution, so a double benefit will accrue from the projected arrangements.

Plans have been prepared for enlarging and improving the laundries and kitchens at Maryboro', by the board's architect, at an estimated outlay of £2,000. The late purchase of land has not been as yet enclosed, the governors still objecting to incur the expense of erecting a suitable boundary wall along the public roads at either side, the necessity of which is obvious.

In the Mullingar Asylum two commodious dining-halls have been in process of erection, under an Order in Council of the 30th June, 1875, on an outlay of £2,000. The inspectors regard such adjuncts essential to the well-organised institution for the insane.

At the Richmond certain unfinished portions of the boundary walls were completed, and alterations in the lavatories with a view to a continuous supply of water undertaken, at an expense, under Privy Council Order, of £800.

Increased provision for 100 beds with other necessary works was authorised by Order in Council, on the 22nd October, at the Sligo Asylum, the estimated outlay being £14,000. The plans, prepared by the architect to the governors, were minutely examined by the Commissioners and in part modified. The same order extended to the purchase of forty-eight acres of land valued at £4,580.

At Waterford also additional accommodation for 100 patients with some alterations in the principal buildings, according to plans drawn out and submitted by the architect of the Commissioners, was ratified by an Order in Council, 6th November, 1875, the proposed estimate of which was £14,000.

## UTILIZATION OF THE ROYAL ALBERT HALL.

A CONTEMPORARY notices some endeavours that are being made to increase the usefulness of the Albert Hall. On the 18th ult., in the interval between the second and third parts of the *Creation*, a member of the council (Mr. George Godwin), in accordance with previous arrangement, addressed an inquiry to the audience from under a small suspended sounding-board. The speaker said the capabilities of the hall for the transmission of musical sounds were admitted; the brilliant audience of that night, and the applause given to the singers, were a sufficient attestation of that fact. But the body of gentlemen who had erected the building had always desired something more than that. The illustrious Prince who had long been mourned—Albert the Good—had contemplated that, around the adjacent gardens, a number of public buildings would arise consecrated to the development of the arts, science, and literature of the country, and it was with that idea in view that the Albert Hall had been built. Some difficulty as to single speakers had been found; but it had occurred to him that such a sounding-board as had been set up in St. Paul's Cathedral might have a good effect. With the friendly assistance of Mr. Penrose, the architect of the Dean and Chapter, this had been obtained, and the question he had to ask them was, Had these words been fairly heard in all parts of the building. A hearty response in the affirmative followed, and the speaker added that, the experiment being successful, the council would seek to persuade some distinguished men of science to deliver lectures in the hall forthwith, and that they hoped to receive the cordial assistance of the public in their endeavours still further to utilise the building. It seems that the remarks were distinctly heard in all parts of the hall. There must have been about 6,000 persons present. There are several public buildings and ecclesiastical edifices in which a like experiment might be tried with a promise of success.

## BOOKS RECEIVED.

*Don Pedro Verdad's Expostulation with the Co-operative Societies.* London: Straker and Sons.

THIS brochure of sixteen pages, in an attractive cover, price two pence, comes from 446 Strand, London. The author tells his readers that "Co-operative trading has, in recent years, attained a most remarkable growth." "In one case it had its origin in an experiment made by some dozen friends, and from a transaction involving one chest of tea, there has sprung into being an association whose dealings verge on a million sterling!" The system of a co-operative trading has been frequently tried in this city, but it has never proved successful.

A HEALTHY BUSINESS.—The President of the Stockport Grocers' Association, in the course of his remarks at the inaugural dinner on New Year's Day, said:—"The grocery trade was acknowledged to be the most healthy of all businesses, and it was excelled in this respect by only one or two professions. Barristers were said to be the longest lived; next to them came clergymen and Dissenting ministers, and after them came the grocers. They might have supposed that gardeners, or persons engaged in tilling the soil, and a number of other employments, were perhaps more healthy than that of the grocer, but, according to statistics which appeared in *Good Words* for August last, such was not the case. Drapers occupied about the same social platform, but they came far below the grocers in point of longevity. It was accounted for in this way: The doors of the grocer's shop were open nearly the year through, and persons engaged in the business being kept pretty well employed, the blood was maintained in good circulation; whereas with reference to the draper, his doors were closed, artificial heat was introduced into the premises, and the articles he deals in constantly throw off dust, which is unhealthy."

\* From the twenty-fifth Report on the District, Criminal, and Private Lunatic Asylums, issued by the Board of Control.



### "ARCHITECTURAL ILLUSTRATIONS."

On the 12th ult. Mr. M. B. Adams read before the Architectural Association, London, a lengthy paper on the above subject. We make room for a portion of it :

Among the books of architecture published during the Georgian period, few have more interest to us, especially at the present moment, than the works of the Brothers Adam, whose "Architectural Designs" came out during the years from 1773 to 1822. The plates were engraved by Bartolozzi, Piranesi, and others. The book opens with a beautiful drawing, representing Minerva in the act of pointing a student to Greco and Rome as the source of all true art and literature ; but, however worthy the conception, and wholesome the advice embodied in it, we do not find the authors always practising their precept, charming as some of their designs undoubtedly are. For instance, they favour us with a new order, calling it the "Britannic." The design is characteristic of its name, as the lion and unicorn are used as volutes on a composite cap, and are interspersed in the foliage of the frieze, after the manner of a Chevy-chase. This was proposed for Carlton House. The general effect of the plates, like all Piranesi's engravings, is too dark, though the detail is well drawn. Halfpenny's "Gothic Ornaments of York," published in 1795, was an important book in its day, and had the advantage of the author's own hand in the execution of the illustrations, which are metallic in effect. Almost all the grotesque heads, as Mr. Eastlake remarks, are shown leering at each other with *pupilled* eyes, the true notion of sculpture being lost sight of altogether by such vulgar conceits. In 1805, Frederick Nash, the first of the line, gave to the world his aquatint views of St. George's Chapel, Windsor, with details to 1 in. scale. The general result of the book is not very satisfactory, but there is a thoroughness of purpose in these so-called pre-Puginesque works not always conspicuous in our own contemporaneous productions.

In considering the subject of architectural illustrations, few names deserve a higher place than John Britton, the author of some seventy works, a large number of which were illustrated. Among the most important were the "Antiquities of Great Britain," 1814, and the "Cathedral Antiquities," which followed, the former work having views by Prout, with plans and a few details, and the latter book was illustrated by the celebrated Mackenzie and Le Keux. The picturesque, however, predominates over the technic in both these works, the geometrical drawings being to an exceedingly small scale. It remained for the elder Pugin to supply this want of knowledge and insure those qualities to the illustrations of architecture which render them of value. Mackenzie and Le Keux had already given more attention to detail and refinement than any one, and, under the professional direction of Pugin, they soon surpassed even themselves. Pugin and Le Keux published their "Antiquities of Normandy" in 1827, and this work is so well known that description is unnecessary, especially since the recently-published edition under the direction of Mr. Phené Spiers. There is one peculiarity worthy of remark in all the elder Pugin's drawings ; it is their exceedingly fine line, enriched with back-lining, which at once destroys all breadth of feeling, and gives a perplexing effect. This practice of back-lining was not confined, however, to Pugin, and is to be observed in several important books published years after. The younger Pugin first brought about a change in the system, but, to quote an authority, "there is a fizziness and action in all his plates which may be looked for in vain in the real thing." If the influence of the works of Pugin is more vivid to us, the important researches of Cressy and Taylor must not be overlooked. In 1829 they published their work on the Middle Ages in Italy,

illustrated by steel plates, the tinted sheets being coloured by hand. Their celebrated work on Rome appeared in 1821, with 135 plates from actual measurements taken on the spot. The views are well etched by George Taylor, but the details are poor specimens of chalk lithography, excepting those of the larger caps. The geometrical drawings are in outline, and it is worthy of remark that the various materials and the manner of construction employed are carefully shown. The last edition of this work was published just before Mr. Taylor's death, a year or two since.

Turning once more to the Gothic school, the name of Lewis Nockalls Cottingham is conspicuous. To him we owe the first full-sized details of architecture ever published. They appeared in the book illustrating Henry VII.'s Chapel, Westminster, dated 1822. The plates are in outline, very well drawn. The general drawings are spoilt by over-etching, back-lining being used to complete the confusion. Cottingham also tried his hand at lithography, with which he prepared his series of working drawings of "Gothic Ornaments," a rather well-known book. The work was not so satisfactory as the former work, which was probably owing to Cottingham's want of skill with the crayon. The most interesting plates were those of an original design for a mansion in a late phase of Tudor. The elevations are in pure outline, with the windows finished in jet black. This is the earliest example of the practice till lately so fashionable of blacking in the windows in drawings of Gothic work. Sea-green is now supposed to be the more correct thing. In Classic architecture the first full-sized drawings published were probably those of the Erechtheion at Athens, by Henry Inwood, architect of St. Pancras Church ; they appeared in 1830. Owen Brown Carter, of Winchester, was considerably in advance of his day, both as an architect and draughtsman. Some of the leading men in the profession at the present time were his pupils. He published several large plates, of great beauty, his earliest work being some views of Winchester, engraved by Le Kinx. Carter also contributed illustrations to "Weale's Quarterly Papers" on stained glass, but chromo-lithography was then in its infancy, and the result is below par. For steel engravings of this date Wiukle's "Cathedrals" deserves notice, and Henry Shaw's "Details of Elizabethan Architecture," 1834, should not be passed over. The engravings were by Shaw himself, the style of drawing already referred to being employed, but with more success, since it lends itself to the style of architecture shown. Some of the sheets are tinted by hand, and some are chromo-lithographs.

I have not yet mentioned mezzotint engraving, which was very generally employed during the early part of the present century for popular illustrations of architecture. It was invented in 1643. The impression which a mezzotint plate yields resembles a drawing executed in washes of colour. The process is exactly the reverse of that adopted in other styles of engraving. The whole of the plate is covered with a uniformly dark bar, or ground, the design having been previously traced on the surface of the plate in the usual manner. The highest lights are then scraped away and burnished, the second lights being treated next, and so on, till the work is finished, leaving the untouched ground for the darkest parts. Aquatint is similar in character to mezzotint, and is a more recent invention. In either, an Indian-ink or bistre drawing can be very closely copied ; but, like all coloured drawings, the tendency is to obliterate the details of a building, so that they may mean anything. Illustrations were published of John Nash's Royal Pavilion at Brighton in this style. They were drawn by Pugin, showing the elaborate and coloured decorations by these means.

Lithography soon superseded all kinds of engraving for architectural work, and, by the time we are now speaking of, had reached great perfection, as seen by the next books to which we will refer, viz., Joseph Nash's

"Architecturo of the Middle Ages," and his "Mansions of the Olden Time in England," dated 1838-9. C. J. Richardson at the same time published his "Remains of Elizabeth and James." All three books are admirable examples of chalk lithography, more particularly Nash's works. Richardson was more technical in his plates, giving details in outline, as well as pictures, including several in colour. With reference to the so-called facsimiles of John Thorpe's drawings, given by Richardson, they are in chalk lithography, and by no means do justice to the originals, which deserve the closest study. These are to be seen in Sir John Soane's Museum, and a bound copy of tracings, with others, will be found in South Kensington Museum. Speaking of chalk lithography, the name of George Hawkins deserves a high place. His work in this style has never been surpassed. Wm. Richardson's "Monastic Ruins of Yorkshire," published in 1844, and several churches of the day, were drawn by his hand. J. S. Cotman's "Etchings of Norfolk," published in 1838, gave principally views, while some of the plates of doorways are good in detail. . . .

In 1845 we note the publication of Mr. Edmund Sharpe's grand work, the "Architectural Parallels," in two folio volumes, giving elevations, plans, sections, and views in a thoroughly technical manner. The geometrical drawings were made on the stone by T. Austin Paley and R. J. Withers, the views being lithographed by Haworth Fielding. Two and three tints are given to some of the plates, much to the assistance of the perspective views. Mr. Sharpe opened a new field of interest, and has continued to labour in it even to this day, not only delineating the purer forms of Gothic with a thorough knowledge of their construction and *rationale*, but arranging the subjects so that comparisons can be instituted, and the peculiarities of each example appreciated. Professor Wills was the first to apply colour to indicate the several periods of English Gothic in the plans of churches, but to Mr. Sharpe we owe its further application to detail ; thus by referring to the plates of his works on mouldings one can tell at a glance the periods of the specimens shown. The colours used are adapted from the prismatic spectrum ; thus showing the gradual progress of art, and indicating its rise and fall. In 1847 Messrs. David and Raphael Brandon published their "Analysis," followed by "Parish Churches" and "Gothic Roofs," a most valuable series of books. These works are too well known to need description ; and the same may be said of Mr. James K. Colling's beautiful books, commencing with "Details of Gothic Architecture," dated 1851. Billings's "Baronial Antiquities of Scotland," published in 1855, deserves notice. The volumes are illustrated with steel engravings by Le Keux.

We now have reached the time when Continental Gothic began to attract attention. One of the earliest collection of drawings of this style is that found in King's "Study Book," in four thick volumes, bearing the date 1857, a former edition being published at Bruges. The plates are of special interest, as being chiefly the work of M<sup>r</sup>. Norman Shaw, drawn on zinc plates in outline. All the subjects are shown to the same scale, which has the fault of being too small, necessitated, no doubt, by the size of the larger subjects. Back-lining is employed, and the carving is not particularly well drawn. Wick's "Towers and Spires" is a big book, published in 1858, consisting of beautiful views in chalk lithography. Mr. Norman Shaw's "Sketches on the Continent" were completed in the same year, Mr. Nesfield's "Specimens" following four years later. Both books are illustrated by chalk, the palm being generally awarded to the lithographs in Mr. Nesfield's book, which were executed by Alfred Newman. The influence of these "twin sketch-books," as they have been called, was no doubt very considerable in the impetus they gave to the then increasing taste for French Gothic, and the more muscular forms of construction. This good work (for in one sense it was good,



however much we may regret the continued neglect of the English styles) was taken up by Mr. R. J. Johnson, who published his book of "Early French Architecture" in 1864. Here, to my mind, we have the type of what an architectural sketch-book should be. The plates, all drawn and lithographed by the author, are almost exclusively devoted to measured drawings, with a few perspectives, chiefly in outline, not fussed and fussed up with wriggling lines all over the wall surface, with the detail at most only suggested, like some of the views we see published, said to have been "finished on the spot," and interesting, no doubt, as examples of time sketching, but wonderfully inaccurate, and misleading to a degree. Mr. W. Galsworthy Davie's "Studies in France" form the last sketch-book which has been published; many details are given full size, and some of the sheets are in colour.

[We may supplement the above, by an article in our next or some early number, with a short list of some "Irish Architectural Illustrations," several of which are deserving of notice.]

#### ANENT "RESTORATIONS."\*

AMONG the commonplaces of contemporary table-talk is the explanation of a startling phrase, "to play hell and Tommy." Everybody has heard it interpreted, and there can be little doubt that it contains a reference to the operations of King "Hal" and his Minister, "Tommy" Cromwell, in the suppression of the monasteries. What these great reformers did for conventual churches, another Cromwell did for castles; but, until our own generation, neither Hal nor Tommy had touched our parish churches. Every Englishman takes, or took, a great pride in his parish church. He might prefer to worship elsewhere, if anywhere. He might denounce Popery and prelacy in a breath. But the parish church, in which his fathers were christened and married, where, in the good old times, they were also buried, and where, till lately, their monuments decked the walls, was to him a sacred thing. The parish churches of England are, so to speak, summed up and represented in Westminster Abbey, in which every Englishman who ever hoped to distinguish himself looked forward to resting at last. Dean Stanley has taken from him the value of this honour. Sir Gilbert Scott has deprived him of his parish church. It is no longer an object of ambition to be buried in the Abbey. The admission has become common; it is no more to be desired by a man of real greatness than the garter. A public statue would be almost preferable. And just as Westminster Abbey has lost its glory, so have our parish churches been deprived of their greatest beauty. The English parish church grew up like the English Constitution. At first perhaps only a kind of chapel to the manor house, it gradually became more and more an independent building. There may in some places be a foundation of the much controverted Saxon masonry. Then there is the Norman doorway, with its round arch and zig-zag mouldings, the door which used to be left open at baptisms that the devil might go out through it. Do we not see his horns and hoofs in the gargoyle on the outside, where some clever fellow caught him and nailed him up? There is a porch to protect the door and its ancient carvings, and perhaps in the porch a tablet, setting forth that somebody buried below, "chooseth rather to be a doorkeeper in the house of the Lord." Within, as we look round, we trace the whole history of English architecture, beginning with the round-headed chancel arch, with its perpendicular casing, the little lancet windows in the nave, the fine open timber roof, with its Cromwellian whitewash, and the carved beam which announces that John Smith and James Thompson were the churchwardens when the church was repaired and beautified in 1660. Over the chancel arch are the arms of William III., painted on an orange ground, and ranged in goodly order at either side are the hatchments of old squires, each of whom sleeps in peace, or promises to rise again, while circumambient cherubs smile down upon the school children. The front is "Decorated," but the pulpit dates only from the reign of the second Charles, and is carved all over with classical ornaments, tritons and angels indifferently, in solid black oak. On the floor are the gravestones of twenty generations of yeomen, a Crusader sleeps behind the vicar's pew, and all the eastern wall has tablets commemorating the virtues of the priestly

worthies from the days of Elizabeth. Here a husband records with satisfaction that he has constructed a distich on his wife, which, perhaps, runs as follows—

Quæ per fœmineum sparsa est perfectio sexum,  
Lector, in hoc tumultu tota sepulta jacet.

Near it is the expiring torch and the palm branch in white marble of the late vicar. A quaint but religious epitaph records with many a solemn form the decay of flesh and bones, and the resurrection of the soul of some departed Puritan, while the heathenish classicality of the eighteenth century is traced in the neighbouring lines—

Integer vixit, scelerisque purus  
Ille jacet corpus Georgii Jones.

The galleries have Elizabethan panelling, and the organ bears on each corner a golden angel blowing with puffed-out cheeks a brazen trump. In the corner is a desk on which are chained the remnants of a black-letter Bible; a Corinthian screen divides the vestry from the aisle; and a couple of old helmets, from one of which a banner depends, nod at each other from opposite corners. Such is, or rather was, an ordinary English parish church a few years ago. It marked in its features every phase of our history. It had grown with the growth of the nation, and from the reredos with the Ten Commandments, put up in honour of the Queen's accession, back to the little low window through which the leper of the eleventh century gazed at the rites he might not share, everything reminded one of some little or some great fact, and added to the venerable associations with which every part of the building was covered.

But in almost all parts of England, in almost every parish, this picture no longer exists. It would seem as if picturesqueness was the greatest fault a building could have. Under the false name of "Restoration" everything picturesque has been wiped off our old churches. It is only too easy to multiply examples in which the Elizabethan and Georgian panelling has been torn down and machine-made deal substituted, as at St. Albans; of ancient stained glass removed and patched with new, as at Fairford; of perpendicular chancels lined with thirteenth century tiling, and doorways of the sixteenth century furnished with doors of the twelfth; of the monuments of old knights removed to the porch or tower, and huddled one on top of another, as at Fulham; of tablets taken down from the walls and hidden under the organ-bellows, as at the Temple; of carved oak screens removed as at Canterbury, or patched as at Llangwm; of Norman naves roofed with boarding, on which are painted the signs of the zodiac, while the fables of Æsop decorate the east end, and the dog and his shadow, larger than life, threaten to fall upon the communion table, as at Waltham Abbey; of the old brickwork covered with the delicate bloom of a thousand years spent in the sunshine, the wind, and the rain, new pointed and rubbed down with brickdust, as at St. Albans and Lambeth; thousands of beautiful pulpits carved in the flat panelling and delicate tracery of the English Renaissance, destroyed to make way for hideous and heavy carvings in Bath stone and red granite; of hundreds of brasses torn from their slabs, and either lost, or set up against the wall, or, as at Berkhamstead, relaid upon four different paving-stones; of statues recoloured in all the tawdriness of waxwork and tinsel, as at Worcester Cathedral and Stoke d'Abernon; of hundreds of other examples, where unique features have been obliterated, inscriptions defaced or recut, plaster stripped off or put on, Italian Gothic grafted on English, deep mouldings replaced by shallow, old well-worn stones, coloured with age, soft and round, picked out and hard square angled stones put instead, carvings hacked away and modern imitations substituted: of these and many other things I might tell from my own personal knowledge, though—thank heaven—I am not an architect; and all these things are summed up in the one word "Restoration." I ask a bookseller where he got that rare black-letter Bible. "Oh, such a church was restored, and—and so on." Or I see a magnificent piece of panelling, with richly cut egg and dart mouldings, serving as a fire-screen in a kitchen. Where did that come from? "Oh, from such a church. It's been restored, you know." Or a quaint little kneeling figure serves my friend for a bracket. Whose monument did it belong to? "Oh, they threw it out when the church was restored." There must be some great advantage to gain by this wonderful restoration, of which we hear so much. Or else there must be something abhorrent to Christian worship in an old church. I do not know, but perhaps some good Christian can tell. I only see that one by one the beautiful old buildings of which, even as a child, I was fond, are disappearing, and that in their place I only find the hard, dry, machine-made architecture of the present day. A restored church has a tile pavement from Staffordshire where

the old gravestones used to be. Its walls are new pointed, the tablets being removed, and their places occupied with gin-palace scrolls in zinc. The old glass, full of prismatic hues, and dotted here and there with a martyr's face, a coat of arms, the fragment of an inscription, is all gone, and a frightful and staring transparency has taken its place. The knight and his dame, who had slept for centuries in the chapel they built, are removed, the knight into the tower, the lady no one knows whither; if by chance they are still allowed to remain side by side, their respective places are changed, and Sir Reginald no longer clasps his Johan's hand. Indeed, all the hands are gone, as well as the knight's sword, his nose, and the two little dogs which slumbered so long at the lady's feet. The church has in fact been gutted. Scaffoldings and ladders have been employed to knock off the carvings; the windows have all been broken; the brasses taken off the stones and removed to the vicarage, where their identity having been lost, they have been thrown aside, and finally sold to a travelling tinker by the housemaid. When all the stained deal and encaustic tiles, the new mosaic reredos and the granite pulpit, the gas standards and the brass altar rails have been put in their places, the bishop comes; there is a great flourish of ecclesiastical trumpets; a sermon is preached; an offertory collected; a luncheon eaten, and the church is pronounced a restoration.

For every one of the examples I have named above, I could name two more. Our cathedrals have suffered even more than our parish churches. Canterbury has been terribly mauled, and now Sir Gilbert threatens the western stalls. He is busy at Rochester, and little is left of what Wyatt left at Salisbury. Chester has utterly perished, according to a recent writer; but I have not had the heart to visit it since I heard that the venerable stones had been replaced with new. At St. Albans, Sir Gilbert, I hear, says he took the original plaster off the tower because the townsfolk wished it—but this is no reason. Why do people employ an eminent architect if they do not want him to set them right in these very matters? But, indeed, St. Albans no longer exists as a historical and ancient edifice. It will soon be all modernised, like Canterbury and Salisbury, and half-a-dozen more. I have no personal spite against Sir Gilbert Scott, whom, indeed, I do not know; but, Sir, if you and your powerful brethren in the press do not soon take the matter up, we shall shortly find ourselves without a parish church, as we are already without a cathedral, as old as St Paul's. The architects talk despairingly of these destructions, but many of them were Sir Gilbert's pupils, and cannot attack him in public. For myself, I shall warmly thank you if you will allow me to make my woes known. I am not powerful enough to make my protest heard in papers where such questions as this are usually discussed; and I fear I have trespassed upon you beyond all reasonable bounds. Thomas Cromwell at least left us picturesque ruins where we may have pic-nics; Oliver Cromwell did not take away much beyond the roofs of Norman keeps; but of the churches touched by the modern restorer nothing is left worth speaking of, or that an artist will care to sketch.

#### GOOD NEWS—IF TRUE!

UNDER its head of "Notes on Current Topics" our contemporary the *Medical Press* prophesies that "the whole town" [Dublin] will ere long "be made as healthy as any in England"! Although deeply impressed with the necessity for an improvement in our sanitary condition, we are not so sanguine as to imagine with the *Press* that it can be so speedily as well as perfectly accomplished. Could not we have a resident Sanitary Commissioner appointed by our friends of the *Record*?

"Some time ago we had occasion to notice the zeal which the authorities at Birmingham have shown in taking advantage of the Artisans' Dwellings Improvement Act, and the great improvement that has within the last few years taken place in the sanitary and social condition of that great town. We are now glad to find that Dublin has been one of the first towns to follow suit in this great work of ameliorating the sanitary condition of the working classes. In a speech which the Recorder of Dublin recently delivered to the grand jury of his court, he announced that St. Stephen's Green would be in future preserved as an ornamental garden for the recreation of all classes; and, what is still more gratifying, that the municipal authorities had resolved to carry out important sanitary improvements, in accordance with the provisions of the Act above mentioned. They propose commencing at

\* From the *Examiner*.



once with two of the twelve areas which have been condemned by Dr. Mapother as incapable of being put into a proper condition, except by 'comprehensive reconstruction,' and *probably it will not be long before all the other objectionable districts of Dublin receive the same attention from its municipal authorities, and the whole town be made as healthy as any in England.* Besides, when the *chief metropolis* of a country leads the way in any great sanitary movement, it is generally found that *other smaller towns* follow the good example that has been set them; and, therefore, there is every reason to expect that before many years have elapsed, the improvement in the sanitary state of the Irish people will be as great as that which has taken place in their social condition."

#### ASPHALTE NOTES FROM KINGSTOWN.

THE following is reported amongst the proceedings at adjourned audit of the township accounts by Mr. G. W. Finlay, Local Government Board auditor. Mr. John McEvoy appeared as objector to several items. The item £47 10s. for four asphalte boilers paid for without the certificate of the surveyor was allowed, the Auditor ruling that, even if the boilers turned out to be unsuitable and the commissioners had to purchase others in their stead, he could not surcharge. Mr. McEvoy next objected to the item £180 for ground limestone. In reply to his questions the town clerk stated the commissioners had not by public advertisement invited tenders from contractors. On this evidence Mr. McEvoy called for a disallowance, the 57th section of the Commissioners' Clauses Act directing that tenders should be invited for every contract of over £100 in amount. The town clerk urged that some time previous the commissioners had invited the Limmer and the Val de Travers companies to tender. The minutes having been referred to, it was found that on the 8th September, 1875, the commissioners accepted the offer of Mr. Fottrell on behalf of the Val de Travers company to supply "mastic asphalte" at 70s. per ton, the commissioners laying the material. Further on it was found that the commissioners provided a contractor to lay, and obtained the sanction of the Local Government Board to a loan of £2,000 for asphaltting. After all these arrangements were completed the Val de Travers company was offered for sale. Mr. Fottrell, solicitor, attended at the sale on behalf of Mr. Crosthwaite, himself, the town clerk, and Mr. John Fottrell, who had authorised him to appear for them and bid up to £3,500. Mr. Fottrell purchased at that price, but, as he alleged, without naming his principals. Mr. Crosthwaite refusing to pay the stipulated purchase money, the Val de Travers Company had instituted proceedings in Chancery, meanwhile ceasing to manufacture; and, in consequence, the Commissioners had to make other arrangements for asphaltting. They purchased the ground limestone from Mr. Fottrell, who was not connected now with the Val de Travers Company, because that gentleman held a patent for the use of that material in asphalte laying. Mr. McEvoy said the value of the material was about 10s. per ton, instead of the 24s. paid. The Auditor said it appeared to him a serious case, and one in which Mr. Crosthwaite should be afforded an opportunity for explanation. Mr. Crosthwaite said that when the commissioners used, as they did at first, the Limmer asphalte, they did not require the ground limestone, but when they decided to use the Val de Travers they required the limestone. Mr. Fottrell claimed to have a patent for the mixing of asphalte with limestone, and this patent Mr. McEvoy himself saw. Finding this patent in their way, they had said to Mr. Fottrell, What will you supply us with the material for? He said he would give it for 24s., but it ought to be 30s., and he also refused to take an order for less than 150 tons. Mr. Kelly said that the Limmer asphalte cost them £4 10s. a ton, and they could not mix it, whilst the Val de Travers when mixed cost only £2 10s. In reply to the

Auditor, Mr. Crosthwaite said it had been attempted to be made out that he was a partner of Mr. Fottrell and Mr. Ennis, but he repudiated the partnership. Mr. Finlay said his view of the matter was that the commissioners ought to have complied with the section of the act as to advertising for tenders. Possibly they might only have got one tender—that from Mr. Fottrell—but it would have been a compliance with the provisions of the section. Mr. Ennis said that would only have been a colourable advertisement. Mr. Finlay said he was coerced by the terms of the section to surcharge the amount, £180 16s. 6d. Mr. Crosthwaite said he should appeal against the decision.

#### THE DUBLIN IMPROVEMENT ACTS AMENDMENT BILL.

THIS bill came before the Examiner yesterday. Counsel for objectors stated that this was one of the most singularly drafted bills ever presented to Parliament. The title occupied some half dozen pages, and no fewer than twenty or twenty-five acts were proposed to be incorporated. The notice of the bill occupied twelve columns of the *Dublin Gazette*. The examiner expressed an opinion that the bill had come before him in an extremely improper way. It was ultimately passed, "shorn of some of its clauses which proposed to give exceptional and, in one instance, monstrous powers to the Corporation."

#### HOME AND FOREIGN NOTES.

**MONUMENT TO A SCULPTOR.**—The French Academy has voted a sum of 4,000 f. for the erection of a monument to its late sculptor, Perraud.

**ARCHITECTURAL ASSOCIATION.**—At an ordinary general meeting to be held this evening at 212 Great Brunswick-street, Mr. T. H. Longfield will read a paper on "Art Museums."

The parish church, Chenderry, County Tyrone, has been re-opened. A chancel, vestry-room, porch, and heltry have been added to it, and the entire building has been remodelled. A handsome pulpit and reading-desk are placed on either side of chancel arch. We have not learned the names of the architect or builder.

**CHURCH OF NOTRE DAME.**—The doors of the Church of Notre Dame are about to be replaced by new ones, having fallen to pieces from old age. They are masterpieces of ancient sculpture, and will, it is said, be placed in one of the national museums. The new ones are of oak with iron mountings, and the carvings are exact copies of the old doors.

**NEW WORK ON PERSPECTIVE.**—MM. Baillière and Co. are about to publish a new work on perspective by Mr. H. J. Dennis, of the Lambeth School of Art, with a commendatory introduction by Mr. J. Sparkes, Head Master of the Art Schools, South Kensington. The title is "Third Grade Perspective, comprising Angular and Oblique Perspective, Shadows and Reflections."

**ROYAL ARCHEOLOGICAL INSTITUTE.**—The first meeting of this body will be held on Friday, the 2nd inst., when some objects of great interest, particularly examples of ecclesiastical embroidery, &c., will be exhibited, and papers read. The delay in commencing the session has risen through the long illness and death of the late secretary, Mr. Joseph Burt, whose services to archæology are known to all European literati.

The Royal Irish Academy is about to publish a series of autotype copies of Ogham inscriptions. The work will be edited by Samuel Ferguson, Esq., LL.D. The inscriptions, being generally on both sides of a solid angle, cannot be photographed direct from the stones. The copies about to be published by the Academy are photographed from plastic matrices capable of being sufficiently flattened to present both faces of the sculptured arris in one plane.

In spite of the dulness of trade in Germany, the number of newspapers forwarded by post in 1875 was 285 millions, or 26 millions more than in 1874, and 37 millions more than in 1873. In the middle of 1874 the newspaper stamp duty was abolished. The number of post-cards forwarded in 1871 was 3 millions; in 1872, 8 millions; in 1873, 27 millions; in 1874, 36 millions; in 1875, 52 millions; the letters in the latter year reaching 398 millions, or eight letters to one post-card.

**A WORTHY ARTISTS'-MODEL.**—A well-known artists'-model named Dubosc has just died in France, at the age of eighty, leaving a sum of 200,000 f. amassed during an exercise of his calling since he was seven years old. Dubosc has left his money to the Académie des Beaux Arts to be invested in three per cent. rentes, the revenue of which is to be distributed every year in equal portions to the young painters and sculptors admitted to contend for the Prix de Rome, and to be distributed to them on entering their rooms.

**NATIVE BRICKS.**—We would direct attention to the advertisement in our columns of the bricks manufactured by Mr. Wardrop at the Courtown Harbour Brick and Tile Works. Their past use in this city affords a fair criterion of their future and extended application. With improved machines, the proprietor is at present able to turn bricks out at the rate of 20,000 per day. Solid bricks, sustaining the pressure of 100 tons to the superficial foot previous to exhibiting any symptom of fracture, afford a good test of their soundness and durability. The Courtown bricks are of red cherry colour, free of saline matter, and never purge, as many classes of bricks are known to do.

**OLD CHURCHWARDENS' ACCOUNTS.**—The parish church of St. Michael's at Bath is the fortunate possessor of what are probably the oldest churchwardens' accounts in the country. The earliest of them bears the date 1349, and they are continued to the middle of the reign of Elizabeth. Not only do they throw a good deal of light upon the topography of Bath and its neighbourhood in the middle ages, but they are also full of curious details relating to church furniture and ceremonies. The existence of these interesting documents has long been known, and some portions of them were copied for legal purposes nearly a century ago, but the first thorough examination of them has recently been made by the Rev. Prebendary Pearson.

**RIVER INUNDATIONS.**—Mr. Jas. Lynam, C.E., draws attention to extensive and formidable Irish inundations:—"The Shannon, the Suck, the Barrow, Lough Corrib, Lough Erne, Lough Neagh, and many small rivers, obstructed in their flow by weirs, weeds, and shoals, have risen to great height, overflowed vast tracts of land, and done much harm in remote localities, amidst a poor population, for whose sufferings there is little sympathy, and who have little hope of any aid. Probably 250,000 acres of land were under water or very injuriously saturated by the Irish rivers on the first day of this year. Who can say when they may be dry enough for agricultural purposes, or what the loss will be to the wealth and to the health of the several districts?" The deplorable condition of the River Shannon is pointedly referred to by Mr. Lynam, and he sensibly asks, How long will it be allowed to remain in its present state?

At Maryborough petty sessions an application was made by the sub-sanitary officer for an order to enter premises for the purpose of inspecting a choked drain. He was ordered to consult the solicitor to the sanitary authority. The magistrate (Dr. David Jacob) remarked that there were other nuisances almost as dangerous to be found in the streets. He hoped the sub-sanitary officer would ascertain his authority with regard to putrid fish being exposed in the street, and the washings of fish barrels and the offal of fish being thrown on the pathway, and left there to become a nuisance. The sub-sanitary officer said that with respect to the washings of fish barrels and offal being thrown on the street, he should first call upon the sanitary officer to report on the matter, and he should report to the sanitary authority, and then notice should be served on the parties to abate the nuisance within a certain time, and meanwhile all this went on!! More redtapeism!!

**RESULT OF NOT STAMPING A CONTRACT.**—Mr. George Kidd, builder, of Ogleforth, York, brought an action in the York County Court on the 9th inst., against Mr. J. Duncanson, of Yearsley Bridge, York, for £18, balance of account for work done and materials supplied in building a house in Huntingdon-road. Plaintiff sent a tender to defendant in which he offered to construct the house for £318. The tender was accepted in July, 1874, and the house was completed within a year. Defendant paid various sums on account until a balance of £18 only remained, and when pressed for that sum he declined to pay, alleging that the work was badly done. The specification and tender were produced, but they were unstamped. After a brief discussion, the judge ruled that the tender must be stamped, and told Mr. Blackburn that his client must pay the penalty, £11 1s. 6d., before proceeding further. Plaintiff, however, elected to be non-suited.



**FIRES AT THE POST-OFFICE.**—At a meeting of the Corporation on the 24th ult., a letter was read from the secretary of the Post-Office, dated the 16th January, acknowledging the receipt on the 8th December of the resolution of the council on this subject. A copy of the resolution had, the secretary wrote, been sent to the General Post-Office in London, and to the Commissioners of the Board of Works, under whose charge the building is, and there was no objection to comply with the request of the Corporation that the chief of the fire brigade and the city architect should examine the building as to its structural condition, and the best means of preventing the occurrence of fires. He further suggested that the architect of the Board of Works should accompany them. It is noticeable in connection with the above letter, which was "not delayed in transmission," that another fire occurred on the 15th, the day previous to the date of the letter. The missive was referred to the Waterworks Committee, who will no doubt throw cold water upon it!

**THE PARIS EXHIBITION.**—The Royal Commission for the Paris Exhibition of 1878 are the Prince of Wales (President), Lord Lyons, the Dukes of Richmond, Manchester, Sutherland, and Westminster, Earls Spencer, Cadogan, Granville, and Northbrook, Lords Tenterden and DeLisle, Hon. Edward Stanhope, Hon. R. H. Meade, Sir Alexander Cockburn, Sir Stafford Northcote, Dr. Lyon Playfair, the Lord Mayor of London, the Lord Mayor of Dublin, the Lord Provost of Edinburgh, Sir Stirling Maxwell, Sir Nathaniel de Rothschild, Sir Richard Wallace, Sir John Rose, Admiral Milne, General Horsford, Sir H. L. Rawlinson, Sir Rutherford Alcock, Sir Henry Thring, Sir Francis Grant, Sir Lewis Mallett, Sir John Gilbert, Dr. Hooker, Mr. J. R. Bennett, Mr. Prescott Hewett, Lord Skelmersdale, Mr. George Robert Stephenson, Mr. Sampson Lloyd, Mr. B. Samuelson, Mr. Rivers Wilson, Colonel Wilson, Colonel Loyd Lindsay, Mr. Edward Ashworth, Mr. Lovthian Bell, Mr. Hugh Birley, Mr. James Chamberlain, Mr. Wm. Holmes, Mr. Leighton, Mr. Samuel Morley, Mr. John Mulholland, Mr. Mundella, Mr. Rathbone, and Mr. H. W. Ripley. In reference to the above, our contemporary the *Builder* pertinently observes:—"Strange to say that, although the President of the Institution of Civil Engineers, the President of the Water Colour Society, and the President of the Agricultural Engineers' Association are named members of the Commission, the President of the Royal Institute of British Architects is not included, nor is there a single architect in the list." Shabby, very shabby, and invidious conduct!

**ENGLISH AND FRENCH WORKMEN.**—Mr. Frederick Britain has reported to the Associated Chamber of Commerce the result of a visit to France, made at their request, with a view of obtaining information respecting the rates of wages, the hours of work, the cost of living, and other matters connected with manufactures in that country, particularly with regard to their bearing on the hardware trades of Birmingham and Sheffield. Mr. Britain alleges that the secret of the wonderful prosperity and wealth of France is to be found chiefly in the sobriety, frugality, and untiring industry of its artisans and agricultural labourers, who usually contrive to save something out of their very small wages. Contrasting the workmen of the two countries, he says:—"In the iron and hardware trades, in the least favourable cases, English workmen earn 25 per cent. more in nine hours than French workmen do in eleven, twelve, or even thirteen hours, and that in a large number of cases the difference reaches 50 per cent. In many of the branches of the Sheffield trade the men earn fully twice as much in their short day as Frenchmen, engaged in kindred trades, can earn in their long day. It is not usual to close the manufactories in France on Saturday afternoon; in fact, in many places the men work on Sunday till noon, or even later. I have not met with any branch of manufacture in which the nominal hours of work are under 66 per week; but in a large number of cases they reach 72, and sometimes 75, and even more. The cost of living is not quite so high generally in France as in England. The workmen usually live upon very frugal fare, and in some towns seldom eat meat."

## TO CORRESPONDENTS.

B.C.—There are several works on engines and boilers, but we cannot say which is the best. "Weale's Rudimentary Series" contains two or three small volumes, very moderate in price. The publishers (Crosby Lockwood and Co., 7 Stationers'-hall-court, London), if written to, will send you a list of the above and others upon the subject.

ANTIQUARIAN REMAINS.—There are some historic spots north and south of the Liffey, which, if excavated, would doubtless reveal much that would be worth knowing; but what might be the value of the "finds" is another question.

Who will supply the funds to unearth the "finds"?—That is a different question.

QUEST.—Mr. James Fergusson, architect, F.R.S., is a Scotchman by birth, and a native of Ayr. He was born in 1808, and is the author of several able works on the literature of his profession.

AN ARCHITECT'S ASSISTANT.—Thanks; but we do not care to chronicle such very "small beer," and leave that unenviable task to the penny-a-liners of our daily Press.

A PLUMBER.—Yes, by all means, buy Euclyan's book. You will get a wrinkle or two from its pages worth knowing.

RECEIVED.—J. W. C.—M. D. (thanks)—P. L. G.—S. and Co.—Ormonde.—C. E. (we will try in the course of the year)—R. E., Edinburgh—Architect (would need too many diagrams)—B. A.—T. R., &c.

**THROAT IRRITATION.**—The throat and windpipe are especially liable to inflammation, causing soreness and dryness, tickling and irritation, inducing cough and affecting the voice. For these symptoms use glycerine in the form of jujubes. Glycerine, in these agreeable confections, being in proximity to the glands at the moment they are excited by the act of sucking, becomes actively healing. Sold only in 6d. and 1s. boxes (by post 14 stamps), labelled—"JAMES EYRS & Co., Homoeopathic Chemists, 48 Threadneedle-street, and 170 Piccadilly, London." Dublin Depot—Hamilton, Long & Co., Lower Sackville-street.

A notable service is being done by Messrs. Cassell Pether and Galpin in reproducing for circulation in this country Knight's valuable "Dictionary of Mechanics," which, as issued from the American press, met with a highly favourable reception in the United States. The work is being judiciously issued here without alteration, and in the form in which it was published in America, as it will thus afford an opportunity of testing the exact relation in which the mechanism of America stands with that of this country, whilst it cannot fail to afford the greatest possible assistance to all those on this side who are concerned in the most recent development of mechanical art. The work is being issued in a serial form, and at a moderate price, which is well adapted for its specific purpose of wide-spread distribution.—ADVT.

## NOTICE.

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

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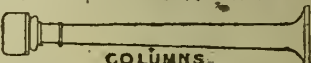
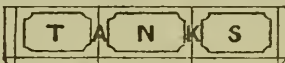
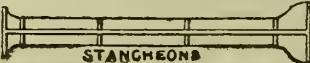
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## Illustration.

DESIGN FOR THE DE VESCI MONUMENT.


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## THE IRISH BUILDER.

VOL. XIX.—No. 412.

SANITARY TALK AND  
SANITARY ACTION.

 SINCE 1870, and more particularly since the passing of the English and Irish Public Health Acts, sermonising on sanitary matters has become most rife. Some sound practical legislation has been effected, but, from the clashing of a variety of interests, needful and urgent reforms are retarded, and work absolutely called for and mapped out remains unaccomplished. We have numerous sanitary acts in force which are not enforced, and more are now being called for to remedy the very evils for which previous acts were passed. The Towns Improvement, the Nuisances Removal, the Burial, the Police, and more recent public health acts contain numerous clauses applicable to existing nuisances, obstructions, &c., and yet our municipal and local bodies or their officials seem to take no cognizance of these clauses, and, when appealed to, coolly tell the aggrieved that they have no power.

In London and some provincial towns in England there are certain building acts in force; and in Belfast, if not in more places, there are building acts applicable to glaring evils of building construction, yet, on the whole, as far as our experience goes, we find that building acts are but seldom enforced.

In Dublin we have been long calling out for a Building Act; our architectural bodies have been calling for it, but our municipal body has done little more than talk about it. When the present Home Secretary brought in his Artizans and Labourers' Dwellings Act for the sister kingdom, we instantly recognised its importance, and were the first, or one of the first, in this city to call for its application to cities and towns in Ireland. The Dublin Sanitary Association also took up the question, and earnestly worked for the same end.

Under the Metropolitan Board of Works

in London large spaces are being cleared with a view to street widening and improvement, and much dilapidated and uninhabitable house property is coming down; but notwithstanding the objects contemplated by the act, the provision of healthy dwellings for the distressed working poor on or near the sites of their former habitations are not realised. In London enormous sums by way of compensation have been paid to landlords and leaseholders, and the cleared sites have been let again by the Metropolitan Board for building purposes at very high sums. Large warehouses and shops are occupying the places of not only former warehouses and shops but courts and alleys in the rear of former buildings, which were inhabited by hundreds of the poor. The working classes have in several instances been scattered, and are now being scattered hither and thither over a large metropolis, and obliged to settle down in districts long distances from the centre of their employment. This ignoring of the objects of the act is now meeting with a public remonstrance, and the Home Secretary's attention has been judiciously called to the matter, and the result will be a more faithful and forced compliance with the clauses of the act.

It is in the power of the local boards and vestries of London to do much in the interest of the poor in their respective districts in the matter of improved dwellings, for the Metropolitan Board of Works is but a body made up of representatives of the local boards. Unfortunately many of the members of these local boards or vestries in the London metropolis, like the members of other boards we wot of in this country, are owners of the worst description of house property—houses not fit for habitation, rookeries and fever nests, chronic hot-beds of disease and crime. This unprincipled class of men will not improve their wretched and unsanitary house property, but they are particular in exacting the rents (under threat of the broker or eviction) from the unfortunate tenants who are obliged to live in such homes. These local board representatives and landlords are also alive to every project towards metropolitan improvement in their respective districts, not that they are glad to hail it in a sanitary sense, but that they are likely to personally benefit by a large sum by way of compensation should their property come down to make room for a new street or the widening of one.

In Dublin we have no Metropolitan Board of Works, but we have a Corporation, and a number of Township Commissioners. Though some members of the latter local bodies may be members of the former, the local bodies are of course distinct. Notwithstanding this, influences to accomplish certain ends are traceable from the Corporation to the Township boards, and also in the union boards, which north and south have a number of representatives who are members of the Corporation as well. It is necessary for outsiders and for friends in the sister kingdom to be aware of these facts, for it will enable them now and again to draw their own conclusions of the why and the wherefore of certain successes or failures.

The Corporation of Dublin now stand committed to the carrying out of the provisions of the Artizans and Labourers' Dwellings' act, and it is to be hoped they will not much longer stand upon the ceremony of acting, but act at once. Long years have

been wasted in fruitless discussions on the expenditure of thousands of pounds in a stand-still policy, over a Main Drainage act; long years have been allowed to pass since new street and wide street improvements were first projected north and south of the Liffey; long years been occupied in agitation and discussions over new bridges, and the enlargement of existing bridges over the Liffey; long years have been allowed to elapse since the report upon public abattoirs was brought up and discussed; long years have been spent in wrangling and jobbery over the pavements question; long years has the city witnessed and suffered from a system of scavenging which would disgrace any third-rate town in the sister kingdom; and long years have gone by with other glaring evils unredressed. Surely the time has come for a little honest practical work, and a cessation of the intolerable talk that has distinguished the career of our Corporation for the past twenty years.

At the present moment in the sister kingdom, and particularly in London, there is a plethora of talk upon sanitary matters. It has become fashionable now to have something to say upon building, drainage, warming, and ventilation. Everybody now who wishes to be thought a somebody, is anxious to air his or her ideas on the question of public health. The mania is spreading in this country, and we have no fault to find with the enthusiasts, if they have only some practical knowledge to give the community, and if they are themselves masters of the questions they lecture or read papers upon. There are now several noted, and other would-be noted personages, apart from the architectural profession, so enamoured with Sanitary Science, and who think themselves so thoroughly up in all that appertains to drainage, ventilation, and building construction, that they are ready to instruct architects and builders in the work of their lifetime. Well, we are ready to allow that there are not a few architects and builders who would be the better of a little instruction, and who might be benefited by a hint from the humblest member of the community; but fashionable talkers and theorists, and mere readers of papers at literary institutions are not the class from whom practical knowledge of sanitary principles in connection with building construction is to be obtained. The preacher in the pulpit, the judge upon the bench, the doctor in his visits to his patients may do much good betimes, as occasion offers, in giving a little judicious advice, as regards the simple laws of health, the duty of complying with the Sanitary Acts, and the godliness of cleanliness. It is to be regretted that the members of the classes we alluded to did not, as a whole, aid the cause of Sanitary Reform years ago when it was less fashionable, and when the working poor stood in sore need of education, not only in this matter of health, but in a general way.

Let us again repeat, what we particularly want now is action or work—the embodiment of many good principles into practice. Since 1845 we have been passing laws for the preservation of the public health in our towns and cities, and their name is at present legion. Many of these acts were of course faulty, and had to be amended from time to time; and the same will happen in course of years in respect to our most recently-passed sanitary acts.

While labouring for the improvement of



our present acts where needed, or agitating for new and distinct acts to meet certain sanitary requirements, it is our duty to use the powers that we possess, whenever and wherever applicable. There has been a general supineness on all sides—citizens and ratepayers have neglected to exercise their rights in appealing to the central authority; municipal bodies and other boards have neglected their duties; and the central authority, not being called upon to act by the people, seldom put the law in force by compelling those on whom the legislature conferred powers to insist on their proper administration.

In the sister kingdom the people or the ratepayers in the towns take a great interest in municipal and local-board questions, particularly in matters of taxation and public improvement; but in Dublin the greater majority of workers and traders are interested in political matters. Politics have never been a profitable affair for honest men, and the sooner our industrial and working classes in this city turn their attention to those questions which intimately concern them, the sooner will a marked improvement be visible in the municipal government of Dublin and in its sanitary condition.

#### SOME EIGHTEENTH-CENTURY PLANS AND NINETEENTH-CENTURY SYSTEMS OF VENTILATION.

“There is no new thing under the sun.”—ECCLESIASTICUS.

MUCH controversy has been carried on of late on the subject of the ventilation of houses, hospitals, &c., and even a bitter war of words has ensued as to the priority of certain patented systems; several professional and non-professional combatants have entered the lists, some claiming honours and others royalties. It is scarcely necessary to pointedly allude by name to two or three systems of house and hospital ventilation which are at present the subject of fierce criticism; but if the respective authors and critics of these systems had only evidenced a little research in building and sanitary progress for a century or upwards back, they would have modestly held their tongues, for the most ambitious of these would-be inventors are at best but modifiers of other men's inventions—men who have thought and laboured and lived long years before our modern adapters were born.

In the course of this article we will give a summary of one or more systems of ventilation carried out at home and abroad in public buildings and hospitals towards the close of the last century, and we will let the reader draw his own conclusions when he compares these systems with some of those which are at present agitating the public and professional mind.

In the “Transactions of the American Philosophical Society” (vol. iii., 1793), held at Philadelphia, there is a paper by Mr. Le Roy, a member of the Royal Academy of Sciences, entitled, “Observations on the Construction of Hospitals.” The essay of Le Roy is accompanied with several plans which were transmitted by the author to the American Society, and the essay contains many remarks of a local nature respecting Paris. The construction of hospitals, Le Roy holds, is in general objectionable, either because many of the wards do not admit of perfect ventilation, or because the air passes

from one patient over another, by which means contagious diseases are often spread. To avoid these inconveniences he advises that a large hospital should consist of distinct and separate buildings, each forming one ward, erected upon arches or columns at a considerable height from the ground, and ranged at a distance from each other like tents of an encampment. The ceiling or roof of each ward should be formed into a number of spherical arches according to its size, the crown of each arch being in the middle of the breadth of the ward, and opening into a funnel like a common chimney, which should be supplied with a vane (resembling a cow), so that it may be always open to leeward. In each floor, midway as to breadth, should be a row of holes at suitable distances from each other, to admit air from below, so constructed that the quantity of it may be regulated at pleasure. In consequence of this structure, Le Roy holds that there must be a constant change of air; for that which is in the lower part of the ward, being warmed by the patients and nurses and the necessary fires, will ascend, and, in consequence of the spherical construction of the roof, will be directed to the openings in it, and flow through them, while the holes in the floor will afford a supply of fresh air which will move rapidly, as it enters the room so low. A number of arches with openings is preferable, he thinks, to a single arch in the centre, because the air, in passing from the extremities of the room in the centre, flows from one patient over another; and a plane or flat ceiling, even with apertures, is improper, because the upper air at a distance from the apertures cannot move to them. As to warming, Le Roy says the room can be warmed by placing grates or stoves over those holes in the floor, and no bad effect can be produced by the fire, as the air and vapours will ascend from it, and go off by the holes in the ceiling. If it be necessary to quicken the circulation of air, either on account of the sluggishness of the atmosphere or the contagious nature of any disease in the ward, small fires may be fixed in grates or stoves near the openings in the ceiling, to increase the motion of the air. To prevent the spreading of contagion, as well as to keep the sick from beholding the sufferings of each other, a screen of suitable height should be placed between each ward; and for contagious diseases and surgical cases he suggests there should be a number of wards, at a distance from the hospital, and to leeward of it with respect to the prevailing winds.

Thus wrote Le Roy in the last decade of the last century on the construction of hospitals, and their ventilation. How far, let us ask, have our present patented systems of ventilation improved upon his system? and would it not be desirable if his suggestions as to separating the sick from beholding the sufferings of each other were carried out at the present day? In some hospitals we have known patients, in pain themselves, obliged to witness the dying throes of other patients in the beds on either side of them. It is only just to say that we are aware that at present in some hospitals screens are placed between the beds when a patient is known to be dying.

We will now give a digest of an essay (as far as it relates to our subject) by Joseph Clarke, M.D., M.R.I.A., and master of the Rotundo Lying-in Hospital in this city. This essay appears among the “Transactions” of

the Royal Irish Academy for 1789. Towards the end of 1782 it was found that, of 17,650 infants born alive in the hospital, 2,944 had died within the first fortnight. This terrible mortality called for a remedy. The disease which carried off so many children was general convulsions. This disease is known to nurses under two forms—*black fits* and *white fits*, and sometimes termed nine-day fits, owing to their occurring within the first nine days after birth. Diarrhoea is a constant concomitant of both species of the disease, and at the time that Dr. Clarke wrote there was no example of either of them having been cured. In the first species the face and body swell and turn a livid hue, the paroxysm lasting from eight to thirty hours. In the second form of the disease the body shrinks and grows pale, the poor infant becoming a miserable spectro of emaciation. After maturely considering all the circumstances of this frightful mortality, and comparing in his own mind the construction of the Dublin hospital, and the care taken of the children, with that of other hospitals, Dr. Clarke concluded that the disease was owing to the following causes:—1st. Foul air; 2nd. Neglect of keeping the children clean and dry; 3rd. Irregularity in the manner of living of their mothers, more especially in the abuse of spirituous liquors.

After viewing the subject in the above light, Dr. Clarke proposed a number of alterations intended for the more complete ventilation of the hospital, and for which he says he was principally indebted to Mr. White's excellent work on the management of lying-in women. Dr. Clarke's representations had the effect he wished with Dr. Hutchinson and the medical governors, and shortly the following improvements were carried into effect:—Apertures of a considerable size were made in the ceilings of each ward, which were afterwards changed for air pipes of 6 in. diameter. Three holes of 1 in. diameter were bored in an oblique direction through each window frame at top. The upper part of the doors opening into the gallery were also perforated with a large number of holes. By these means a free and easy passage was given to the air through the wards at all times, and executed in a manner as to put it out of the power of the nursetenders or patients to control. The number of the beds in the large wards was reduced, and several changes made in their construction to render them more airy and more easily kept clean. The results consequent on the above improvements soon showed a reduction in the number of “nine-day fits” or convulsions. Of 8,033 children born since the before-mentioned period up till the date of Dr. Clarke's paper, only 419 died in the hospital, that being nearly 1 in 19, or a third, or from 5 to 6 in the hundred. Had the mortality of infants been in this proportion since the opening of the hospital to the period alluded to, the number of deaths would have been somewhat about 1,300 instead of 3,363, or, in other words, above 2,000 lives would have been saved to the community.

In affording a reason why children should be more affected by impure air than their mothers, Dr. Clarke adduces the experiments of Dr. Bryan Robinson, an Irish professional of some eminence in the earlier part of the last century, which experiments went to prove that in children the mass of blood is larger in proportion to the general bulk than in adults; and Dr. Clarke therefore concludes



that a greater proportion of phlogiston is carried off from their lungs during respiration than in adults, and that, if this is checked, it must be proportionately more dangerous.

Dr. Clarke's conclusion as to the effect of impure air and the requirements needed in hospitals with a view to making them healthful buildings, are stated as follows:—1st. That one effect of an impure atmosphere on the human body is to produce spasms and convulsions. 2nd. That all young creatures, and especially infants within nine days after birth, suffer most severely from such a noxious cause; and, therefore—3rd. That in the construction of lying-in hospitals, and perhaps of all public buildings intended for the reception of children, lofty ceilings, large windows and moderate sized rooms should be especially attended to. 4th. That in the arrangement of such edifices, no apartment should be completely filled with beds, if it can be conveniently avoided, and—5th. That in the management attention is especially necessary to *cleanliness*, as well as to the *constant* and uniform admission of atmospheric air by *night* as well as day; and—Lastly, that by pursuing such measures with care, diseases may be *prevented* which have hitherto been found difficult and sometimes impossible to cure.

The above conclusions, as far as they go, are excellent, and it may be perceived by all who care to know and acknowledge that, although "doctors differ," we had doctors among us a century since who preached that "prevention was better than cure," though the majority of their successors ignored the truth.

We find nothing in Dr. Clarke's Essay about drainage or water-closets or pure water supply; but Dublin, at that date, as well as London and other large cities, had no proper system of drainage, water-closets were not then in the houses but outside them, and mostly at a distance, but still they were little less than normal cesspools. The water supply of Dublin was wretchedly bad in the last century, and for nearly the first half of the present century; and if proof be wanting of the terrible evils that existed in the heart of our city—sufficient at any time to create a plague,—it will be found in the following remarks in Dr. Rutty's "Essay towards a Natural History of Dublin," published in 1772:—

"For, though the air of this city is not contaminated by vapours from the county adjacent, the sea coast being generally dry land, and there being very few standing lakes or bogs in the county, yet it is generally ventilated by divers other mixtures, some of which it were in our power to prevent; for, besides what it has in common with all great cities, viz., the fogginess from the smoke when there is no wind to dissipate it, the dirtiness of our streets, which is so great that one is frequently in danger of being up to his knees in crossing them; the putrid animal effluvia exhalant from channel, house, and dung-bill in the middle of the city and in several of the avenues; and dead animals, dogs and cats, and the excrements of living ones, butchers' garbage and blood, and burying grounds likewise in the middle of the city, where the earth in the graves is frequently loose, the bodies so near the surface of the grave that the scent has been noxious in summer; to which add the great crowds of the poor in one house, sometimes several families in one room—a very frequent occasion of propagating their fevers. . . . As to the water with which this city is supplied, we have a great number of brackish, saline, and laxative springs, but we are for the most part supplied from rivulets issuing from the neighbouring mountains, and partly from the River Liffey, both of which supply a soft water, and the last is well known (being taken up near Island Bridge) to keep well on long voyages; but both of these, as we get

them, are not without suspicion of some degree of adulteration from foreign mixtures, being frequently ill-tasted, partly from the pipes of wood in which they are conveyed, which rot and sometimes breed worms, and as the water lies exposed in several places before it is received into the pipes, dead dogs and other animals are sometimes thrown into it, and dirty clothes washed in it, to which may be added the mills and other offices of divers manufactures erected on the banks of the Liffey," &c.

The above extract affords a sad picture of the unsanitary state of Dublin; still we find there were a few thoughtful and reforming minds in our midst, who were labouring in the interest of the public health, and, had their labours been supported by the legislative and municipal institutions of that day, sanitary improvement in the matter of water supply, drainage, street cleansing, ventilation, and building construction would not have been so long neglected.

Reverting, in conclusion, to the subject from which we have somewhat digressed, we would advise some of the rival combatants of systems of ventilation, who are at present airing their views in a very incautious manner in our public and professional journals, to exercise a little more discretion. What has once been printed, though in the common parlance it may be "out of print," may still turn up at unexpected times. We have aduced suggestions and systems of ventilation which have been modified and perhaps in some instances improved upon; and it is not unlikely we will bring once more on the stage a few more, to the great surprise of patentees, brain-pickers, and discoverers of dead men's brains and once living men's inventions.

CLINTON HOEY.

#### THE DE VESCI TESTIMONIAL.

ACCOMPANYING present number we give the design for above memorial submitted by Mr. S. F. Hynes, architect, Cork, and which was considered second in point of merit. It was proposed to be executed in finely-wrought limestone of a good colour; the shafts of canopy of polished red marble; the trefoils in upper stage, inlays at base, &c., to be of different coloured marbles. Under the octagonal canopy was to have been a carved coronet, and immediately thereunder shields emblazoned with the family arms. The inscription was intended to be placed in the panels in base. The height of monument, 25 ft.; and its cost, £300.

In a letter which accompanied the drawing when returned, the hon. secretary to the Memorial Committee writes:—

"Sir,—The committee for receiving designs for the above have decided in adopting one by Mr. R. Carroll, of Dublin. Of all those submitted to them, your design and his were the only ones selected for competition, and they were so good and of such merit that the committee have not until now come to a decision between them. R. C. HAMILTON."

#### DUBLIN SCHOOL OF ART.

SOME important regulations as to examinations of an advanced kind in schools of art have been issued by the South Kensington Science and Art Department. These advanced local examinations will take place annually in the Dublin schools, in common with some others. Examinations will take place this year, in each subject simultaneously in advanced perspective, anatomy, and design, at the same time and before the same committee as the second grade examinations in schools of art, and will be open to students only who have passed in any two subjects of the second grade. Each examination will occupy one evening, so that a student can only sit for two subjects in one year. It is also pro-

posed that the examinations from still life shall take place in the daytime, and occupy five days of five hours each, and be open to students who have already submitted works in stage 15 to the national competition. The examination in drawing from the antique and from life, and in modelling from the antique and life, will each occupy about twelve hours either of day or evening study, and will be open to students whose works in stages 8<sup>2</sup>, 8c, 19b, or 19d, have already been admitted to the national competition; but no student can be examined in more than one of these four subjects in one year.

It may be observed that these forthcoming examinations of the third grade are the highest yet that have been instituted, and we doubt not that the students in the Dublin school will be as equally distinguished in the advanced examinations as they have been in the preceding ones.

#### THE PROPOSED SCIENCE AND ART MUSEUM.

ON the date of our last issue a special meeting of the members of the Royal Dublin Society was held, for the purpose of considering the proposals of the Government as to the establishment of a Science and Art Museum on the premises belonging to the society. A report of the council of the society was read at the meeting, and the conditions stipulated for in the event of the society consenting to the Government amalgamation scheme. There was also a letter read from Sir M. Hicks Beach, dated the 27th of January, intimating some of the intentions of the government, and asking for more precise information from the Royal Dublin Society. The question of the amalgamation or absorption of the society led to a long and warm discussion on the 1st, and several of the members seemed to have waked up to a realization of their position, and are nowise desirous to consent to the existence of the society being wiped out. We have several times already expressed our opinion in connection with this South Kensington scheme when the Royal Irish Academy was brought upon the table for a like treatment. Having registered our views we can await further evolutions. The following resolution was proposed and seconded at the special meeting of the society, but eventually an amendment was carried, postponing the consideration of the first resolution and the other proposals for a fortnight. Proposed by Mr. Litton, Q.C., and seconded by Mr. William Roper, B.L.:—

"That this meeting dissents from the provisions of the proposed bill on the grounds that the rights and privileges of the society are left unascertained and unprovided for thereby; and until such rights and privileges are ascertained and provided for this society do withhold its consent therefrom; and that in the meantime the council is requested to take such steps as will enable the society to appear during the progress of the bill and insist on such clauses being introduced as will sufficiently protect the rights and privileges of the members."

We are obliged to go to press before hearing the result of the adjourned meeting. If Ireland cannot manage her own institutions she must indeed stand in a sorry plight before the world. There is no need for the Lord Sandon scheme, though there is every need for a Museum of Science and Art for Dublin.

**REMOVING MILDEW STAINS.**—Occasionally, valuable lithographed or printed illustrations are put away too damp, or, after being accidentally exposed to damp, become mildewed. The most successful method of treatment known is to immerse the mildewed sheets separately in a solution made in the proportions of half a pound of chloride of lime to a pint of water. Let it stand, with frequent stirring, for 24 hours, and then strain through muslin, and finally add a quart of water. Mildew and other stains will be found to disappear very quickly, and the sheets must then be passed separately through clear water, or the chloride of lime, if left in the paper, will cause it to rot. Old prints, engravings, and every description of printed matter may be successfully treated in the same manner.



### ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At the meeting of this Institute, held on the 5th inst., Mr. Whichcord, vice-president, in the chair, it was announced that, subject to the approval of the special general meeting to be held on the 5th proximo, and to her Majesty's sanction, the council recommend the royal gold medal for the current year should be awarded to Mr. Charles Barry, president of the Institute.

The drawings made by Mr. E. J. May, Pugin Travelling Student for 1876, were exhibited, and it was announced that the Council had awarded Mr. May the sum of £40, to which he was entitled on the completion of his drawings.

Mr. C. F. Hayward asked whether the Council had taken any action with reference to the omission of the name of the president from the list of the British Commissioners for the Paris Exhibition of 1878. After some remarks upon the same subject on the part of Mr. Eastlake, the secretary, Professor Donaldson, and Mr. Horace Jones, the Chairman said he thought it would be best to leave the question in the hands of the president, who had taken the matter in hand.

A letter was read from Mr. Edmund Sharpe, expressing a wish to meet with two young architects in their pupillage, or just out of it, accustomed to make measured drawings from buildings, to accompany him to Florence, with a view to study and measurement of the churches of Pisa, Pistoja, and Lucca. It has since been announced that Mr. Sharpe has obtained the required assistance.

Mr. Penrose then read a paper "On the Optical Refinements of Greek Architecture."

[We will take it upon us to say here that the systematic way by which it is sought to snub and ignore the architectural profession by omitting the name of the president, or otherwise not including the name of any architect in the list of British Commissioners for the Paris Exhibition of 1878, reflects but little credit upon the Government. Mr. Ayrton, when First Commissioner of Works, contrived to annoy architects, but before Mr. Ayrton's time the snubbing process was begun, and continues still. Under Liberal and Conservative Governments the ill-wishers and bad advisers appear to retain their permanent influence. We think the saddle could be put on the right horse, and the rats' terror exhibited at large if the Institute did not hesitate to speak its mind freely.]

### DUBLIN IMPROVEMENT BILL.

WE are very reluctant to oppose any measure intended for the improvement of this city, but we think that the reasons urged in the interests of the citizens and ratepayers why this bill should be opposed, are conclusive. The corporation should at once avail themselves of the powers conferred by the Artizans, Dwellings' Act, to carry out a system of improvement long and urgently called for. Some of the clauses in this proposed Improvement Bill are both outrageous and audacious. The memorial against the bill should be signed by all sensible and honest-minded citizens. The Standing Orders' examiners of both Houses of Parliament having reported against the bill, of course it cannot now be proceeded with, unless the rules of Parliament are dispensed with, as a matter of favour to its promoters. We endorse the eleven objections to the bill, and thoroughly believe in the final one, which says "The bill is so complicated, so contradictory, and so unintelligible in many of its provisions, as to be unworkable, and certain to prove a source of trouble, expense, and annoyance to all concerned." The question of Municipal Reform is ripening, and a new act may soon be anticipated for reforming the Reformed Corporations, many of which have become more rotten than the ones they supplanted nearly forty years since.

### THE NATIONAL MONUMENTS OF IRELAND.

THE Superintendent of National Monuments of Ireland (Thomas Newenham Deane, Esq.) has made public an interesting account of what has been done at the ruins at Glendalough, Co. Wicklow. We give it below *in extenso*, as we believe the subject is of deep importance to our archaeological readers:—

Although the general public do not take the interest in the ancient buildings of Ireland which might be expected, I venture to hope there are some who may desire to be informed as to what steps had been adopted to preserve those structures designated "National Monuments." These consist of a certain selection of churches, round towers, crosses, &c., which have been transferred to the care of the Board of Public Works.

An erroneous impression has got into the minds of some people that unnecessary restorations have been effected, and that ruins will be made sham antiquities. This, if true, would be a fatal error, entirely at variance with the wish of the authorities, and show want of ordinary judgment on my part as superintending architect.

To combat this opinion is one of the main reasons of my addressing you.

In this letter I shall confine my remarks to the churches at Glendalough, as being well known and frequently visited; and in describing the works on each, shall adopt the usual names by which they are called, and avoid as much as possible critical explanations, which sometimes draw down severe comments from architects and archaeologists, which partake of an acrimony foreign to the questions at issue. In fact, I wish to be an architectural "badger difficult to draw" on any point.

The ruins at Glendalough consist of the following: Trinity Church, The Cathedral, The Round Tower, The Priest's House, St. Kevin's Kitchen, Refectory Church, Our Lady's Church, St. Kevin's Oratory, and St. Saviour's Priory. These have for years excited the interest of the archaeologist, and to some extent the veneration of the public. Ledwich, Col. Conyngham, Bigari, Beranger, Lord Stephens Dunraven, but especially Petrie, have drawn and investigated the buildings. The work of the last named is a complete handbook to the churches, and for those who wish to go deeper into their history I can only refer them to the valuable work of this great artist and archaeologist. With regard to the question of restoration, I may mention that with the exception of a few ring stones to complete the missing ones at St. Saviour's Priory, and which being uncarved are plainly distinguishable from the old, no new cut stone has been used, and no walls have been rebuilt or added to where such addition or rebuilding could possibly be avoided. No speculative attempts have been made to reproduce anything that had the slightest shadow of uncertainty.

Trinity Church.—This is the first church the visitor meets with, on the left, as he enters the valley of Glendalough. It was, like many others, overgrown with trees and ivy, its interior a mass of rubbish, the roots of ash forcing asunder its walls, no protecting fence, the whole subjected to neglect, and the structure on the verge of ruin. The first thing done was to clear the interior of rubbish, carefully selecting all stones of an architectural character. Amongst these were found the arch stones and jambs of the south doorway, the complete stonework of the windows in the western end, one window of chancel on south side. All these have been re-erected in their proper places, the northern quoin has been rebuilt, the gable denuded of destructive ivy, and the stones secured, cement concrete put into the interstices of the wall, the latter being carefully pointed, the cement kept back from the face, so as to maintain the ancient character of the masonry; a proper surrounding fence.

The Cathedral.—This is the most important as to size of the buildings of the valley, exhibiting three distinct periods of architectural detail. Piles of stones obstructed the inspection of the visitor; graves in the wildest confusion were on all sides. On excavating the rubbish near the north doorway the jambs and bases, of fine detail and of Caen stone, were uncovered. The rubbish at the eastern end supplied nearly all the cut stone work of the interior of the eastern window. Beneath the site of the chancel arch were found sufficient of the arch stones to enable a large portion to be reset. One window of the chancel was discovered on the south side. The side windows of the nave were opened. The ground to the exterior has been levelled as far as consistent with respect for graves. The interior of the church is laid with sods, and the walls grouted and pointed with cement concrete.

The accumulated rubbish has been found rich in many things of interest—amongst others a stone

cross, beautifully carved, which, being broken into three pieces, has been repaired and re-erected.

The Tower.—Such was the dilapidated condition of this structure, that the birds were able to fly through the gaps in the stonework from the top to more than half way down to the ground. The interior of the Tower and surrounding rubbish were carefully examined, and produced nearly all the stones of the conical top, which has been rebuilt, the apex stone being found in the Cathedral. Tons of stone and cement have been filled into the gaping sides, and the structure is now safe for ages.

The Priest's House.—This curious little building—which in 1779 drew the peculiar attention of Beranger, owing to its exquisite detail and peculiar pedimented doorway—was nearly level with the ground when the works came under my charge. On careful examination of the surrounding debris every stone was discovered, which enabled me to place it in exactly the same condition as it was in 1779. The carved tympanum, saved from destruction by Sir William Wilde, was returned, with praiseworthy liberality, by his representatives, and set in its original position.

St. Kevin's Kitchen.—Little has been done here further than resetting the loose stones of the tower cap, pointing the stone roof, and removing a mass of vegetation from the roof of the Sacristy. This building will form the receptacle for the various crosses, inscribed stones, &c., which have come to light in scattered positions. The surrounding fences have been repaired, and the adjacent ground laid down in grass.

Our Lady's Church.—Similar operations have been effected here as in other churches, but the debris of masonry has been less rich here than elsewhere in sculptured stones and other objects of interest. A few coins and two keys have been discovered.

Refectory Church.—The tomb of the kings, westward of the others, and near the lake shore, is peculiarly interesting from an archaeological point of view. (See Petrie.) A mass of ruin entirely filled up the interior of the building. On its examination the stone work of east window, the entire of chancel arch, two of the windows of the south wall of nave were discovered. These lay as they fell, and it is proposed to re-erect them. To the south of western entrance a beautiful inscribed stone has been found. In addition to this stone now discovered at Refectory Church, Dr. Petrie has drawn another, which lay in the same mortuary chapel, and which is said to have been entirely destroyed by tourists, who, deeming it the tomb of some unknown King O'Toole, have from time to time broken off bits of the monument to carry away as curiosities. It was a truly historic monument, as it was inscribed to the memory of Corpre, son of Cathal, an anchorite of Glendalough, whose death in the year 1013 is recorded by the Irish annalists. Four other inscribed stones have also been illustrated by Petrie, a portion of one of which is still preserved. It was one of the finest sepulchral slabs ever found in Ireland, carved with a beautifully designed cross, and inscribed to the memory of two ecclesiastics interred in the cathedral—Diarmid and MacCois, the former having been an anchorite of Glendalough, whose death in 955 is recorded in the Annals of the Four Masters.

St. Saviour's Priory stands in an isolated position, considerably eastward of all the other churches; such parts as remain present more careful design than any of the others. If possible it was in a more ruinous condition—a heap of stones, tangled brushwood, and large trees; amongst these stood the jambs of the chancel arch, carved capitals, bases, and a few arch stones were to be seen. Careful examination brought to light the entire number of the ring stones, with the exception of four, the iron work of the double eastern window, the doorways and windows of south side, three windows on north and east, besides numbers of wrought stones, whose positions were doubtful. All these, with the exception of the latter, have been reset in their places. The detail of the eastern window is unique and very beautiful, and the whole forms a relic of careful architectural detail hardly to be surpassed.

This being a popular description of the ruins I have avoided dates, vexed questions, and other matter calculated to provoke discussion, and am only anxious to draw the public mind to a real interest in the relics of the past, in the hope that a work commenced in a limited manner, as to the number of selected buildings, may be extended, and that our Irish ruins may have fair consideration, and be snatched from the destruction which inevitably awaits them if they are left as they are at present.

STEWARTSTOWN CHURCH.—This parochial church, re-constructed in 1875, was totally destroyed by fire on the 5th inst. It was insured for £1,000, a sum considered sufficient to cover any damage that might be occasioned by fire. The incumbent has appealed for funds to erect a new church.



THE TEMPLE OF DIANA AT  
EPHESUS.\*

THE author reminded his audience that in November, 1861, he read a paper before the Institute "On the mode in which Light was introduced into the Temples of the Greeks." He was led to an investigation of that subject from a conviction that it was impossible that so artistic and so ingenious a people as the Greeks could possibly be content with so rude a mode of illumination as merely cutting a square hole in their roofs. It appeared to him that they did not light their temples by openings in their walls for precisely the same reasons that we do not light our picture galleries by windows in the ordinary manner. They, as we, preferred skylights, as more artistic and suitable for their purposes; and what he wished to show then, was, there were means by which this could be successfully accomplished with pleasing effect both internally and externally. It was against sudden changes of climate that the Greeks had to provide, and the mode he then suggested of an opaiou or clerestory, whether it was right or wrong, did provide against them as perfectly as it was possible to do by any mode yet invented, short of the use of glass or some translucent material. Since the time to which he referred (1861), after the discussion which followed his paper, the question has practically been allowed to go to sleep, only one work of any importance, so far as he knew, treating it in anything like a serious manner. In his magnificent work on "Ancient Architecture in Sicily," the late M. Hittorff does examine the question at some length, in which he regrets *in toto* the suggestions of M. Quatremere de Quincy, of Messrs. Cockerell, Falkener, Böttichere, and himself (Mr. Fergusson) as utterly untenable, and proposes for the Parthenon two of his own, which seem to him to combine most of the defects with very few of the beauties of those of his predecessors. However, on the receipt of Mr. Wood's book in Ephesus, he thought he saw in it at once that it offered him the means of putting his views on this subject into such a shape as would carry conviction to others. At the same time he had been working at the sister temple at Didyme, and the one appeared to him so completely to illustrate and confirm the other, that he felt the utmost confidence, in being able to establish his case. With respect to Didyme, his restorations had been based on the plans published by the Dilettante Society from drawings made by J. P. Gandy. He, however, made no excavations, but some were recently carried out by two French gentlemen, with funds furnished by the Messrs. Rothschild. A description of these excavations was published in the *Gazette des Beaux-Arts* last year, and with information obtained direct from M. Rayet had induced him to modify to some extent his ideas regarding it. In what would follow he should occasionally have to dissent from the views expressed by Mr. Wood, not with his facts, which he believed to be perfectly unassailable and perfectly to be relied upon, but with his theories; and this evening he was going to add his contribution, which, however, he was far from fancying final, or nearly so; but if others would only follow up in the same line, and each add their brick to the edifice, we might hope before long to be able to realise within very narrow limits what were the arrangements and what the appearance of an edifice which the ancients ranked as one of the seven greatest wonders of the world. It would not be necessary to go deeply into the history of Ephesus or her temples, as that had already been done exhaustively by Mr. E. Falkener, in his work on the subject, and an excellent *resumé* of it had appeared in the present number of the *Edinburgh Review*. All that would be required at present was that he should call their attention to the fact that the worship of Artemis was established at Ephesus from a very remote, almost mythological, period; and that her temples

there had been seven times destroyed either by accidental fire or by wilful destruction. With the five earlier temples they had nothing to do on the present occasion. It may even be doubted whether they stood on the same spot as the last, though it is most likely they did, as the place is so unsymmetrical, if the expression may be used, that it probably was selected from some sacred or mythological reason, not apparently either for convenience or dignity. Mr. Falkener thought that the sixth temple was built on a different spot from its predecessors. Be this as it may, the last three—and these were the only ones with which they had now to deal—were certainly built on the same spot, and with the same identical dimensions. The foundations of the first of these three great temples seem to have been laid by an architect named Thodorus, about or before the year 500 B.C., at a time when, after the Persian wars, Greece and Asia Minor were enjoying a period of prosperity and intellectual activity, such as the world has hardly seen before or since. The architects, according to Vitruvius, were Chersiphron and Chosphon, and Metagenis his son, who we also learn were employed by Pericles in the erection of the Elusian Temple. This sixth temple seems to have been destroyed by fire about the year 400, contemporaneously with the death of Socrates, and to have been restored by Paionius, the same who built the temple at Didyme; and, as Mr. Falkener conjectures, it was the exultation of all Asia Minor on the accomplishment of this great work that inspired Erostratus with the mad idea of gaining immortality by setting fire to it. It seems, however, quite certain that this event took place in the same year in which Alexander the Great was born—356 B.C. Immediately after this event the Ephesians set to work to rebuild their great temple. It could not, however, have been greatly advanced in 334, when Alexander visited Ephesus and offered to bear the whole of the expense if they would allow him to inscribe it with his own name. How long the work continued we have no means of knowing: probably till about 300 B.C., or it may be later. If, therefore, we assume that the 220 years, which Pliny says were consumed in the erection of the Artemesian, apply to the last of these temples, we have a period of 200 years (B.C. 500 to B.C. 300), with a margin of twenty years, which we may allocate at either end of an epoch according as facts or indications may incline the scale. The point of importance to his present purpose was to show that the first great temple belonged to the age of Pericles, and the eighth, or last, to that of Alexander. These temples belonged, therefore, to the very last ages of Greek art, and we may expect to find in them, not only the greatest elegance of detail and beauty of sculpture, but also all those exquisite harmonious proportions which have recently been discovered in the Parthenon and other temples of that great age. After its final completion the temple seems to have remained intact, in so far, at least, as its architecture was concerned, for five centuries and a-half; though it no doubt suffered in its ornamental parts from the plundering propensities of the Roman Emperors. In or about the year A.D. 253 the city was sacked and its temple set fire to by the Scythians. After that it disappears from history, but it probably was not abandoned as a place of Pagan worship till the time of Constantine; then, or shortly afterwards, an attempt seems to have been made to convert it into a Byzantine church. Whether that intention was ever carried out seems doubtful; either an earthquake, or the gradual rising of the soil about the site, seems to have led to its being abandoned at a very remote date, and since then it has been used as a quarry by the successive inhabitants of Naplium, till only the few fragments which now remain were found by Mr. Wood buried under 20 ft. of silt. Although the results of Mr. Wood's explorations were at first sight disappointing, from the extreme paucity of the remains found, it is most fortunate that what was

found was exactly what was wanted to render a restoration possible. Had he not found the lower step of the base on two sides we should never have known exactly the dimensions of the temple. Had the two bases been on the same side we should equally have been in doubt; and had not one of the antæ and one of the transverse walls of the cella been sound, a restoration must always have been more or less guess-work. Luckily, though the Goths and Vandals left us the fewest possible remains, what they did leave was exactly what was indispensably necessary for our purposes. When the temple is reconstructed from the data found, it turns out, in at least one most important particular, to be essentially different from any other known temples of the Greeks, inasmuch as it stood on a base nearly 10 ft. in height, and extending 38 ft. each way beyond the bases of the columns, and it was probably the ornamented features of this base that rendered the temple worthy to be ranked among the wonders of the world. Be this as it may, we now understand perfectly why all restorers failed in reconciling Pliny's measurements with the known exigencies of Greek art. Architects have been puzzling themselves over this problem for the last two centuries, and if they had guessed on for the next two they would not have arrived at the solution now revealed to us. The number of columns in the peristyle Mr. Wood ascertained to be one hundred, and it is fortunate that an appeal to the spade has enabled this question to be determined. The one point with regard to the peristyle regarding which he differed from Mr. Wood, was that he (Mr. Fergusson) adopted Pliny's height of 60 ft. for the columns instead of 55 ft. 8½ in., which Mr. Wood adopts partly from Vitruvius, and partly from some other authority. Personally he felt great confidence in Pliny's measurements, because when he (Mr. Fergusson) was restoring the mausoleum at Halicarnassus, which is a much more complicated building than this, he found all Pliny's measurements, both vertical and horizontal, to accord perfectly with the remains, or the indications found on the spot. They are exactly what we should expect. The pillars in the sister temple at Didyme are 6 ft. 3 in. in diameter, and 63 ft. in height; those at Ephesus being 6 ft. 1 in. or 6 ft. ½ in. in diameter, ought to be 60 ft. in height. There is also an artistic reason why we should wish to give the greatest possible height to these columns. Anyone looking at the east and west front, as drawn by Mr. Wood, must be struck by their weakness, owing to the wide spacing of the columns, and their squatness, owing principally to the high angle of the tympanum. Adding 5 ft. to the height of the column remedies this defect, and tends more to restore harmony to the fronts than can easily be believed without trying. The great width of the central intercolumniation—nearly 29 ft.—and the graduated spacing towards the angle, is one of the most curious of Mr. Wood's discoveries, but is not peculiar to this temple. One of the most fortunate of Mr. Wood's discoveries was that of the western wall of the cella, the position of which seems perfectly certain, as without it we should practically be left in the dark with regard to the internal arrangements of the temple. No trace of the eastern wall could be found anywhere; and there was room only for a wall 3 ft. thick between its inner face, if set out symmetrically, and the face of one of the piers of the Byzantine church, which existed there, and no part of the wall was found in the pier when removed. It seems that, wishing to gain as much space as possible, and to economise material, they made the walls only 3 ft. This involved no weakness, as it was buttressed to its whole height by walls at right angles, and was increased to 5 ft. in the centre, so that so far as he could see there is nothing, either æsthetically or constructively, to prevent his assuming that the opisthodomus was arranged as shown in the plan. Assuming this to be the case, we have a perfectly symmetrical interior, and one that accords perfectly with the external ordi-

\* By Mr. James Fergusson, F.R.S. Read at Institute of British Architects.



naeans of the temple, which he believed to be an essential characteristic of a true Greek temple. It has also all the requisites of an hypæthral temple according to the system he was advocating. Nothing, unfortunately, was found in the excavation that could give a hint of the architectural arrangements of the interior, except one Corinthian capital, which Mr. Wood describes as oval. A portion of the pilaster was found, but it was just such a form as would be admirably adapted to support a grating, and the acanthus leaves in the centre are separated in a manner that makes it almost certain that some such metal grating passed between them. Many would no doubt be startled—probably offended—at his (Mr. Fergusson) introducing a semi-circular roof over the cella, which is generally supposed to be abhorrent to the Greek mind, but he referred his hearers to De Quincy's argument for adopting that form of roof for the temple of Jupiter at Olympia. The Asiatic mind was familiar with this form of roof, and it was for these purposes, so infinitely more beautiful than a flat ceiling, that he could not see any improbability in their employing it. He might be right or wrong in his theories, but pending the invention of glass or the employment of so translucent medium, it seemed to him difficult to invent any mode by which light could be introduced into the cellas of the larger Greek temples so artistically and so conveniently as this, and till some better mode was pointed out he considered himself justified in believing it was the mode adopted by the Asiatic Greeks at least. There was one slight peculiarity which remained to be mentioned before leaving the interior. A fountain in the cella or in the external portico of a temple is an absurdity that can hardly be mentioned, but under the impluvium of the vestibule it is not only an appropriate but a usual arrangement, certainly in houses, and probably also in temples, especially those with hypæthrae. One of the most important results of Mr. Wood's explorations is, that they have set for ever at rest the question of what the columnæ cœlatae were. Several sculptured drums were found more or less perfect, and these are now in the British Museum. They are 6 ft. in height, and generally 6 ft.  $\frac{1}{2}$  in. or 6 ft. 1 in. in diameter. Amongst the marbles in the Museum there are some half-dozen sculptured blocks which Mr. Wood assumed to be part of the great frieze, though they seemed most unnecessarily massive for that position. After repeated examinations he had become convinced that no other solution is possible than that they formed parts of the cubical bases in which some at least of the pillars stood. Considerable difference of opinion has always existed, and may continue to exist, with regard to the disposition of these thirty-six sculptured columns. What appears certain is that the eight on each end and front were so treated. Those mounted cubical blocks, he believed, never could have been employed in the interior, so as to arrange with the simple bases; and if his views of the hypæthron were correct he had very little doubt that four on each side were employed to bring down the lines of the hypæthron to the ground; and adopting Mr. Wood's hypothesis that the four next the angles in the flanks were sculptured, he thought they had the most pleasing arrangement of the thirty-six that had yet been suggested—viz., eight at each end, and eight in each flank, counting the angle ones twice, and eight disposed in the pronaos and posticum, where magnificence was most wanted. The base, or podium, on which this temple was raised, was the feature which, he believed, justified all the enthusiasm the ancients expressed for this temple, though, unfortunately, it is the part regarding which we have the least information, and in restoring which we must draw most largely on our imagination. He was far from flattering himself that he had succeeded in restoring it as it really was; but he thought there were some points he could bring out which might be worthy of notice. Mr. Wood found the lower step, which was 8 in. high with a 19 in.

tread; but he nowhere found one step upon another. With these dimensions, fourteen steps took him up to the level of the floor of the peristyle, and to the back of the mass of masonry supporting these steps, which was at the distance of about 15 ft. from the bases of the columns. Nothing could to his idea be more inartistic than placing the peristyle on a broad plain platform that prevented the base of the pillars being seen everywhere, and diminished, *pro tanto*, their apparent height and dignity. It would have been infinitely preferable to have brought the steps close up to the peristyle, and so added their elevation to that of the temple, and allowed the columns, with their sculptured bases to be plainly seen. Another defect of this arrangement was that it accorded with none of Pliny's measurements, in which he had unbounded faith, wherever we can feel sure we have got his figures correctly. Feeling this strongly he set to work to try to reconcile the "duo centum viginti pedes" of Pliny with Mr. Wood's plan, and found it accorded with his fifth step from the bottom, assuming it to be Greek feet, equal to 223 ft. English. He thus retained the three steps of Chersophron's original temple, but omitted the next two, one of which he placed in front of the column of the peristyle; the other he thought there was room for on the top of Mr. Wood's pyramid. At the back of the 4 ft. platform thus obtained he erected an upright stylobate of the requisite dimensions. He had gone so far with this and other details of his restoration, when he received a note from his friend Mr. Watkiss Lloyd, who was not the least aware of what he was doing, but who was working at the temple from a totally different point of view in order to try to find out its numerical ratios. In that letter Mr. Watkiss Lloyd pointed out that Mr. Wood's dimensions for the peristyle—342.54 by 163.79—were so nearly a double square that by adding  $7\frac{1}{2}$  ft. all round, or 14.96 each way, you got an exact double square. Having gone into this point with considerable minuteness, and stated the ratios arrived at by Mr. Watkiss Lloyd, which he regarded as being of great value and importance, Mr. Fergusson remarked that he need hardly point out how satisfactory it is to find that Mr. Wood's plans are so minutely accurate that we are enabled to deduce from them ratios hardly inferior in exactness to those obtained from the Parthenon and other well-known Greek buildings. That seems to be almost positive proof that Mr. Watkiss Lloyd got within three inches the same measurement as he got by the protraction of the same line. This shows Mr. Wood's measurements are as minutely exact as can be; otherwise it would be impossible for these ratios to come out as they do; and, secondly, they confirm Pliny's measurements so completely that we have facts before us which we cannot mistake. The system of hypæthra was not applicable to the smaller Greek temples named in his previous paper, and they must have been lighted by apæians or clerestories.

### "THE SEWAGE QUESTION."\*

INSTITUTION OF CIVIL ENGINEERS (LONDON).

THE object of this communication was stated to be twofold. First, to limit and define the proper application of the various systems introduced from time to time for dealing with the sewage of towns. Secondly, to direct attention to certain subordinate questions arising upon the practical operation of such systems. For the purposes of this paper, the following classification had been adopted:—1. Treatment with chemicals; 2. Application of sewage to land, including irrigation and intermittent downward filtration; 3. The dry-earth system; 4. The Liernur or pneumatic system; and 5. Seaboard and tidal outfalls.

*Treatment with Chemicals.*—In this section of the paper reference was made in consider-

able detail to the practical experience of the lime process at Leicester, Tottenham, Blackburn and Birmingham; the A B C process at Leicester, Leamington, Crossness, Hastings, Southampton, Bolton and Leeds; the sulphate of alumina process at Coventry; the phosphate of alumina process at Tottenham, Barking and Hertford; Goodall's process at Leeds; Bird's process at Cheltenham and Stroad; Dugald Campbell's process at Battersea; and Whittbread's process at Tottenham. It was stated, generally, that the experience of these processes was more or less identical with that which had been derived from Holden's, Hille's, Lenks', Suvern's, Scott's, and in fact all other methods which, by the admixture of chemicals, it was sought to effect the purification of sewage by the precipitation of the dissolved and suspended impurities, and the ultimate realisation of the precipitate in the form of a manure. This experience, coupled with certain opinions of Professor Frankland, Mr. Krepp and Dr. Corfield which were cited, was relied upon as establishing the following conclusions:—That no chemical process could efficiently deal single-handed with sewage, but must be assisted by subsequent natural or artificial filtration of the treated sewage, and therefore no chemical process *per se* should be adopted for the purification of town sewage. The principal objections to chemical processes, which appeared upon the experience of the places where they had been adopted, and upon which this conclusion was founded were, inefficiency of treatment, cost of treatment, and difficulty of manipulating the accumulations of sewage sludge.

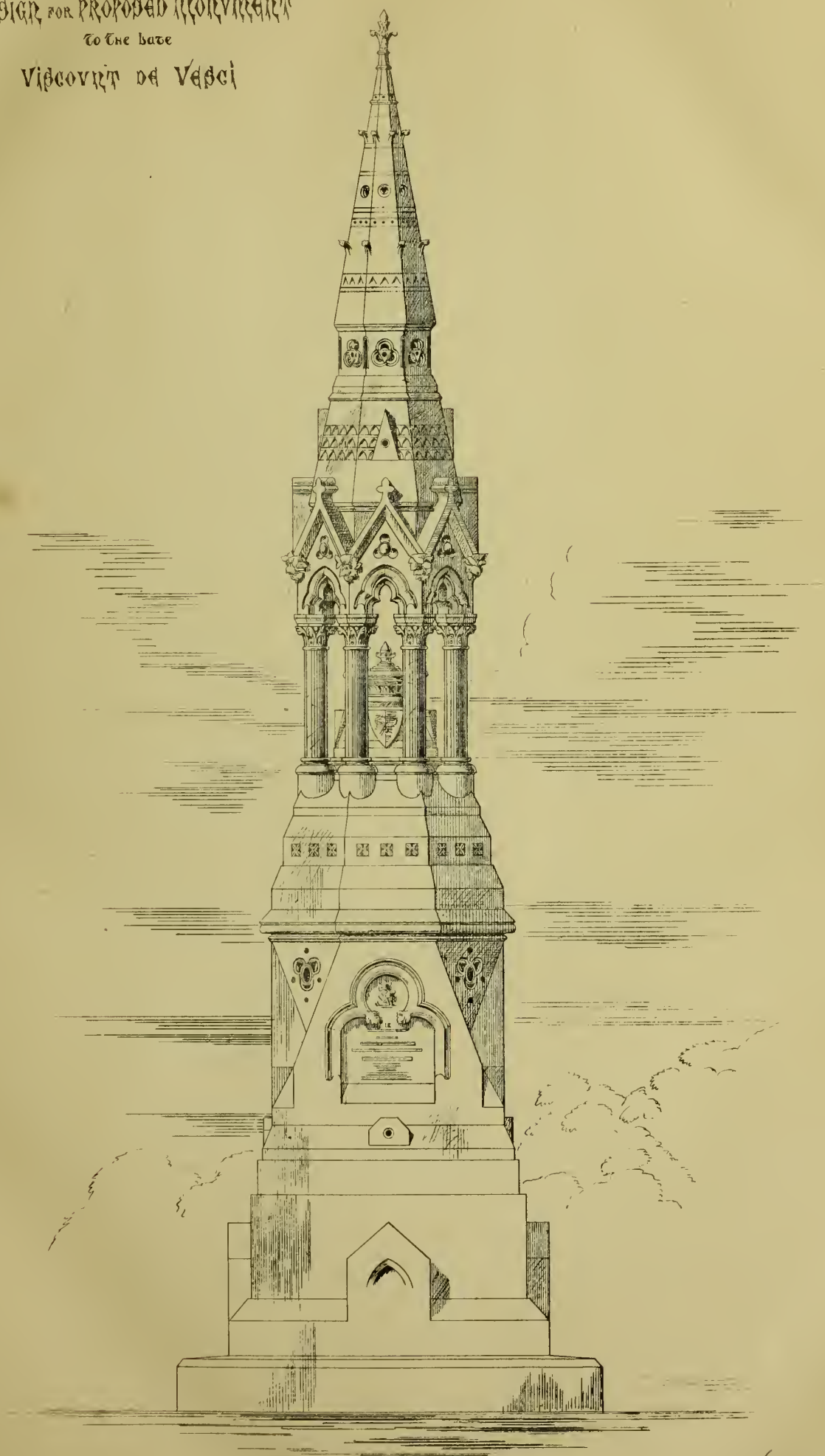
*Application of Sewage to Land.*—The author first considered whether sewage could be made to yield an agricultural profit. The parliamentary return of 1873 was referred to, and the financial position of the Warwick farm was specifically examined. The question was also raised, whether sewage possessed any fertilising value beyond ordinary water for the purposes of irrigation, and the experience of the Barking farm having been appealed to upon this point, the conclusion was laid down, that no profit ought to be expected from the cultivation of crops by sewage irrigation. The next point discussed was whether any definite standard could be laid down as to the proportion population should bear to acreage in the practice of irrigation, the proportions exhibited by eleven towns being referred to, and it was determined that it was impossible to frame a specific rule. The theory of intermittent downward filtration was then investigated, as based upon the laboratory experiments of the Rivers Pollution Commissioners; and it was argued that the proportions which they had affirmed population might bear to acreage, ranging in the case of 1 acre drained 6 ft. deep from 2,000 to 3,800 persons to the acre, were too high, and were not justified by the experiments. The practice of downward filtration at Merthyr was next referred to, and it was shown that the extent of its practical operation there had been exaggerated, and that the results confuted instead of confirming the proportions of the Rivers Pollution Commissioners. The experience of Walton and of Kendal was also reviewed, and the following general conclusion completed this section of the paper:—That where land could be acquired at a reasonable rate, irrigation was the best and most satisfactory known system for the disposal of sewage, but that intermittent downward filtration might be practised where the necessary surface area for broad irrigation could not be obtained. Experience, however, showed that the permanent proportion of population to acreage, where land was drained 6 ft. deep, should in no case exceed 500 or 600 persons to an acre.

*The Dry-Earth System.*—The applicability of this system to towns was next considered, and it was shown that it must be supplementary to, and not substitutive of, a water-carriage system, thus enormously increasing the cost of making sanitary provision for towns. The effect of its introduction into the metropolis, as a test case, was illustrated

\* Abstract of paper read on the 6th inst., by Mr. C. Norman Bazalgette.



DESIGN FOR PROPOSED MONUMENT  
TO THE LATE  
VISCOUNT DE VESCI



John J. Hynes  
Arch.  
3 Camden Place  
Co. Dublin 27<sup>th</sup> 1876



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by figures, to prove that it would be superfluous, costly, cumbrous and impracticable. Indeed its applicability became diminished in the inverse ratio to the increase of population, to which it was proposed to apply it; and though it might be occasionally used with advantage in hamlets or detached buildings and institutions, it was unsuitable for the wants of towns.

*The Liernur or Pneumatic System.*—A description of the mechanical characteristics of this system was first given, and then the experience yielded by its operation at Leyden, Amsterdam, and Dordrecht was specifically analysed. It was supplementary to, and not substitutive of, a water-carriage system, extremely costly, and its mechanism was complicated and liable to get out of order. The accumulation of sewage residuum in the central reservoir, and its subsequent decanting into barrels, were operations which could not fail to be objectionable and offensive. Its appliances were therefore not suitable for a high-class community, and no return from the manufacture of "poudrette" could be expected. In conclusion, it was urged that the system was of such a character that, though it might have a partial province in the tide-locked cities of the Hague, where no system of sewerage was available, it should never be imported into an English town.

*Seaboard and Tidal Outfalls.*—The first point considered was the return of the sewage of seaboard towns upon the beach; and it was maintained that where care had been taken to determine by float observations the force and set of the currents to which the sewage was to be committed, there was no difficulty in preventing such a result. The sea constituted the most natural and economical outfall for the sewage of towns situated upon it, and such means of outfall should be adopted. With regard to sewage outfalls upon the tidal portions and estuaries of rivers, there ought to be, arguing from the experience of the metropolitan outfalls, and assuming that proper precautions were taken in the selection of the outfall, and the exclusion of silt from the sewers, no danger of the silting up of the navigable channel.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

BENJAMIN VICTOR, who was for some time a deputy-manager of Smock-alley Theatre under Sheridan, is entitled to favourable notice. Though not a man of brilliant abilities, he was a many-sided and useful personage, and honest and faithful in the discharge of his duties. While in Ireland, Victor had good opportunities of acquiring knowledge of Irish theatrical ways and manners, and his position placed him in contact with several native and English actors. He deserved far more praise than he has received at the hands of some dramatic chroniclers in the sister kingdom. Though not of this country, Victor appears to have had warm sympathy for our people, and to have felt quite at home while living in this city. He is said to have commenced life as a peruke maker, and afterwards to have relinquished that profession to engage in the sale of Norwich stuffs. Neither avocations proved remunerative, and, having strong literary and theatrical proclivities, he took to dramatic authorship. Like others, his first essays were not successful, and he met with rebuffs when he applied to Rich to introduce his plays upon the stage. Rich was mostly prone to throw cold water upon young aspirants unless there were overwhelming reasons in their favour. His refusals were seldom polite, and he was unnecessarily insulting in his answers. It is related of Victor that, when told by Rich that his dramatic pieces "would not do," he asked the haughty manager to state the particular reasons of his unfavourable determination. Rich replied, "Mr., there is too much horse-hair in your tragedy." This was of course a

deliberate hit at poor Victor's former profession. After some time, by perseverance, he made headway, and, as we hear, became deputy-manager and treasurer at Smock-alley, and subsequently for a short period a proprietor of the same in partnership with Sowdon.

After leaving Dublin, Victor filled the office of treasurership at Drury-lane Theatre, with much credit and satisfaction. While in this office he collected his works and published them in three volumes by subscription. Among the dramatic pieces written by Victor are—"The Two Gentlemen of Verona" (altered), "The Fatal Error," "Altemira," "The Fortunate Peasant, or Nature will Prevail," and "The Sacrifice, or Cupid's Vagaries." The principal work, however, by which Mr. Victor's name is known is his "History of the Stage," which has been the subject of repeated attacks. Despite its faults it contains much interesting matter in connection with the stage generally and performers, and also useful historical particulars in relation to the Dublin Stage, and theatrical entertainments in this city during Victor's time. Victor and his work is thus spoken of in the new edition of the "Biographia Dramatica," published in 1782, originally compiled as "Companion to the Playhouse," by David Erskine Baker. "This gentleman's singularities (for some he had) were of quite an innocent nature. He regarded the proper arrangement of a playhouse as the greatest and most important task proposed to human abilities. He was, therefore, solemnly and tediously circumstantial in his accounts of entrances and exits, P.S. and O.P., described to an inch the height of every plume and the length of every train he had seen upon the stage, and dwelt much upon the advantages received by many authors and actors from his experience and admonitions. He likewise contrived to prolong these his narratives by repeated summonses to attention, such as 'Sir, sir, sir; observe, observe, observe,' and was the most faithful chronologer of a jest, a riot, or any other incident, the representation of a new play." Victor did not escape the satiric pen of Churchill, who remarked of his History of the Stage that *Victor ego* should be its motto. He died at an advanced age, some time about 1779, at his lodgings in Covent Garden, without any previous illness or pain.

West Digges, whose proper name was West, made his first appearance on the stage in Dublin, having been previously in the army. He was supposed to have been the natural son of a nobleman, but we are told that his father was a Colonel Digges, of the Guards, a gentleman of family and fortune allied to the "first nobility in England." West Digges's father is said to have rashly engaged in the South Sea scheme, and, like other speculators, was involved in ruin, losing his large paternal estate in Kent, which he was obliged to dispose of.

It is not necessary for us here to trace the surroundings of the early days of West Digges. After selling his commission he contracted the acquaintance of Theophilus Cibber, who introduced him to his father. He was advised to try his fortune in this country, and on applying to Sheridan he met with a hearty encouragement. We have already told of his first appearance, in 1749, on the Dublin boards in the character of Jaffier. O'Keefe, in his "Recollections," thus recounts his first experience of Digges: "In my juvenile days someone gave me a note to Digges, the actor, that he might put me in to see the play. I was brought through the dark lobbies, and up and down many stairs and windings, to his dressing-room, where I found him preparing himself for his part that night of Young Norval. There were six large wax candles burning before him, and two dressers in attendance. I was struck with awe and veneration. After suffering me for a sufficient time to stare at him with astonishment, he said, 'Take the child to the slips,' and I was led through the carpenter's gallery, the cloudings, and thunder boxes, and placed in a good seat, where I saw

the play with great delight. Digges was the best Machaet I ever saw in person, say, or manner." We fancy that little Jacky O'Keefe must have been a very precocious child when he visited Smock-alley, and possessed a very retentive memory. He must have been somewhat advanced in his teens, though he reports that Digges alluded to him as "the child." It is to be remembered, however, that O'Keefe wrote a play at the age of eighteen, which was acted on the Dublin stage, so that after all he was a precocious boy, and lived to be a very old boy, dying in 1833, at the age of 86, having been born in 1747, two years before Digges's first appearance upon the Dublin boards.

Boaden, in his Life of Mrs. Siddons, observes of Digges:—"It gives me the greatest satisfaction to say that Digges was the very absolute Caratach of Fletcher (Bonduca); the solid bulk of his frame, his action, his voice, all marked him with identity. I mean assuredly to honour him when I say that it was quite equal to Kemble's Coriolanus in bold, original conception and corresponding felicity of execution."

Digges is thus depicted by George Colman: "He had studied the antiquated style of acting, and Davies, in his 'Dramatic Miscellanies,' states him to have been the nearest resemblance of Cardinal Wolsey he had ever seen represented, if he had not sometimes been extravagant in gesture and quaint in elocution. In short, he was a fine bit of stage buckram; and Cato was therefore selected for his first essay. He 'discharged the character in the same costume as, it was supposed, was adopted by Booth when the play was originally acted; that is, in a shape, as it was technically termed, of the stiffest order, decorated with gilt leather upon a black ground, with black stockings, black gloves, and a powdered periwig. Foote had planted himself in the pit when Digges stalked in before the public, thus formidably accoutred. The malicious wag waited till the customary round of applause had subsided, and then ejaculated in a pretended undertone, 'A Roman chimney on a May day!' The laughter which this produced in the pit was enough to knock up a *débutant*, and it startled the old stager personating the storic Ulica. The sarcasm was irresistibly funny; but Foote deserved to be kicked out of the house for his cruelty and his insolence in mingling with the audience for the purpose of disconcerting a brother actor."

Hitchcock, in his "View" writes that "Digges was possessed of almost every requisite of a great actor. Nature had bountifully bestowed her favours upon him. His figure was happily suited to represent the hero, lover, or man of fashion. His person was tall and elegant, yet manly; a countenance open, yet expressive; an eye marking, and full of vivacity. His address was easy and engaging, his manners refined and polished. He had received the most liberal education, and he seemed to have been formed in the school of Chesterfield; few men ever sacrificed more to the graces than Mr. Digges. No man was ever a greater favourite with the fair, or a more pleasing, desirable companion amongst his own sex."

In his dramatic portraits of Barry, Mossop, Digges, and Woodward, the actor under notice stands in the position assigned him as third, Hitchcock ranking him next after Mossop in merit and reputation. Viewed by a moral standard, it must be admitted at the same time that Digges's conduct was highly reprehensible, though he was not one odd in this respect. At a much later date than the time we are writing of, Digges acted in Edinburgh under the name of Bellamy, a name he borrowed from the celebrated actress of that name, with whom he was then living. While in "Auld Reekie" in 1764, Digges was thrown into prison by his creditors, but he escaped, and eloped with a merchant's wife, leaving that city heavily in debt. Anticipating events, let us add that West Digges's theatrical life was brought to a close on the Dublin stage in the year 1784. While rehearsing the part of Pierre to Mrs. Siddons'



"Belvedere" he was seized with paralysis, was carried from the theatre, and never acted again.

In 1749, when Mossop and West Digges made their first appearance on the Dublin stage, dramatic entertainments appear to have arrived at a high perfection, and Smock-alley, for some time at least, was well patronised. The following list of names shows that the Dublin theatre possessed several of the best actors at the period:—Sheridan, Mossop, West Digges, Cibber, Macklin, Elrington, Ross, Bardin, Morgan, Sparks, Kennedy, Howard, Sullivan, and Beamsley. The ladies were represented by Mrs. Bland, Miss Danvers, Miss Griffith, Mrs. Macklin, Mrs. Storer, Mrs. Lampe, Mrs. Mozeen, Mrs. Kennedy, and others of minor note.

At this period tragedies had a good run, and were well supported. Sheridan played Brutus in "Julius Cæsar;" Mossop played Cassius; West Digges, Antony. In "The Orphan," Sheridan played Chamont; Digges, Castalio; Mossop, Polydore; Cibber, Chaplain; and Monimia by Miss Danvers. In "Jane Shore," Digges played Hastings; Mossop, Gloster; Sheridan, Damont; Miss Danvers, Jane Shore; and Mrs. Bland, Alicia. The season that witnessed the above performers in Dublin turned out a brilliant one, and profitable to the manager, who we learn found his receipts increased £2,000 beyond any of the preceding years.

The next season witnessed new engagements, the appearance of fresh novelties, and the reappearance of old favourites; and amongst the rest Sheridan secures the celebrated and fascinating Peg Woffington, who, after a long absence, makes her reappearance in her native city, to astonish everyone by the brilliancy of her acting.

#### GIOTTO'S "GOSPEL OF LABOUR."

THE Slade Professor of Fine Art at Cambridge delivered a lecture on the 25th ult., at the London Institution, Finsbury-circus, on Giotto's "Gospel of Labour."

The Professor commenced by saying he had come before them to show an interesting series of Florentine sculptures which were executed in the first half of the fourteenth century at Florence. Their workmanship was very simple, almost rude; they consisted of twenty-six panels in marble, carved in relief with subjects chosen to represent men's life and men's industries upon earth. The particular point that made them the most interesting in the whole history of art was that they exhibited in a kind of epitome the whole essence of civilisation, the whole genius of a great people at the greatest time of their history. He called this series Giotto's "Gospel of Labour," because they set forth for the first time in the history of art those arts and industries upon which the power and the fame of the great cities of modern Europe rested. The Italian cities—and Florence first—were the nurses of modern civilisation, of modern commercial industries—the origin, in fact, of all those energies, whether of good or evil, that made the world what it now was. This rude, early, and simple series of sculpture he had chosen to illustrate the whole soul of Italy in the thirteenth century.

He was not going to trouble them with complicated matters of history, but for the purpose of his lecture it was necessary to point out the two great aspects of the thirteenth century in Italy. First of all, the beginning of the thirteenth century showed the whole mind of Europe, especially Italy, to be in a state of anarchy and change. New centres of commerce were beginning to grow up, and the urban populations were beginning to get crowded and uncomfortable, but at the same time intelligent. The church scarcely touched these populations. Owing to their abject misery and neglect, they became hotbeds and centres of rebellion. The years 1203 to 1220 threatened great religious changes, revolution, and reform; but there then arose certain influences which arrested

the course of things. The greatest influence was that of St. Francis of Assisi, who was truly an "apostle of men," he being born with an overwhelming love of his fellow-creatures. He firmly grasped the doctrines of the Roman Catholic Church, and owing to the spirit of himself and his agents, there were gathered into the fold of the Catholic Church all those populations that were beginning to grow restive, and show signs of rebellion. For good or evil, this change was brought about by St. Dominic, of Spain, and St. Francis, of Italy. All the public and the collective life of the cities was dedicated and consecrated to the church. The second great aspect was the political one. There had always been all over Europe a certain number of industrial people who escaped the domination of the feudal powers; but it was not till the thirteenth century that the trading and manufacturing communities of Italy asserted their independence and established a republic life of their own, and made themselves free from, and independent of the princes, dukes, and other various orders of feudal hierarchy who asserted their supremacy over them. The aspect of political life was then a complicated one. The first of the questions was, whether the trading and artisan classes should or should not have the government of the cities in their hands; and the gradual efforts by which these classes succeeded in dispossessing the feudal magistrates of their power was one great part of these civil struggles, of which Italy was full. Another important struggle was that between the Guelphs and the Ghibellines—the spiritual and the temporal power,—the Pope and the German Emperor. These two powers could not co-exist in peace. Ultimately the imperial power was overthrown, and the Pope became the champion of all civil and religious liberties, Florence being the great centre where this great change was worked out with the most successful issue, the city where the real Republican Government was founded upon an essentially-popular and industrial basis. In the year 1250 the first rising of the people took place, and ten years afterwards the famous fight was fought out.

The new organisation rested upon trade arts or guilds upon which the whole civilisation depended. These Florentine arts or guilds had the whole government of the town in their hands, and comprised the following:—Notaries, judges, and lawyers, merchants, wool-staplers, money-changers, including bankers and dealers in finance, apothecaries, including all kinds of druggists and doctors, silk-weavers, tanners and hide merchants. Then came five lesser arts—clothing and haberdashers, butchers, boot-makers, and masters in stone and wood. Under the latter modest title all painters and artists—all men who had made Florence illustrious—were included; and as they never constituted themselves into a separate guild, their professional status was that of "masters in stone or wood." The last of the five lesser arts was that of smiths and ironfounders, including all goldsmiths and workers in fine metal. These arts or guilds became the real source and centre of government.

As might be thought, this was a prosaic time, but there were signs of greatness in the freedom of the people; they succeeded in uniting business-like management to their commercial affairs. These practical men were the most imaginative. With the eagerness of their new life, they were not found quite so forward, historically, in raising public monuments, or in beautifying and adorning their churches like some of their neighbouring cities; but when they did begin, the work grew under their hands. The church, which became to be the expression of all they loved and cherished, was the Cathedral of Florence, the church of the obscure local Saint Reparata, as it was first called; or, as after the Franciscan preaching up of the Virgin, it began to be named, that of St. Mary of the Flower, or of the Lily. The Florentines bestowed the whole of their energies in endeavouring to make this church a monument worthy of the city. From the

first it was regarded as an embodiment of the dignity of the city. This was expressly stated in an extant grant to its first architect, Arnolfo, of freedom from all public burdens. In 1334, Giotto succeeded Arnolfo, and after having completed the façade of the building, he designed the campanile, or bell-tower, which was his title to glory as an architect. The base of the campanile was ornamented by this very interesting and remarkable series of sculptures; and it was after Giotto's drawings that they were subsequently chiselled by Andrea Pisano. Of the twenty-six panels there was reason to believe that the last five or six were done more than one hundred years later by Luca Della Robbia. Visitors to the cathedral, for the most part, had not probably noticed these beautiful sculptures, for they were placed at the base of the bell-tower. By these sculptures Giotto set himself to dignify and ennoble all sorts of honest toil, and the trades of all the seven greater and five lesser guilds, in the ornamentation of the building. In them was expressed the whole essence of the time in which he lived. They were fairly comparable in all essentials with the finest works of Greek art, while they were marked with special beauties of their own,—simplicity, directness, and perfect justness. All works of history at that time began, as a matter of course, at the beginning of things. In these sculptures, too, the series commenced with the creation of man, but they showed a variation upon the conventional treatment. Instead of following with representations of the temptation and the fall after the creation, they were shown Adam with a large spade, and Eve with a big distaff, so bringing them back to the time

"When Adam delved and Eve span."

Then it immediately occurred to the beholder that the sculptures were intended to represent the history of human industry, following upon the expulsion of their first parents from Eden. The next in order was the gentle shepherd's craft, represented by the patriarch Jabal, "the father of such as dwell in tents, and of such as have cattle." He was depicted as sitting under canvas, with his flock and sheep dog round him. The key-note which was struck in the Book of Genesis was acted upon throughout the series, and the various arts and industries had their representations in aged patriarchal figures. The next representation was Jubal, "the father of all such as handle the harp and organ," represented as blowing through some shapeless instrument which he had succeeded in making, the drapery being extremely well executed. Next followed Tubal Cain, "an instructor of every artificer in brass and iron," who, as a blacksmith, was represented with bellows, anvil, pincers, and hammer. The cultivation of the vine, so important an industry in Italy, was said to have been symbolised by the Patriarch Noah. Then came one of the seven liberal arts, astronomy; the stargazer was looking skywards, and his globe and zodiac were to be observed, this panel being the best preserved of the whole series. Building followed, the master builder (probably the patriarch Enoch, who "built a city," although some had thought it might be Giotto himself), with thoughtful brow, directing the masons in their work. Pottery came next, women being represented as bringing cakes of clay for the potters; which was followed by a marvellously truthful representation of the art of horsemanship, the spirited horse and the daring rider who first tamed him being rendered with equal mastery, both of thought and chisel.

Weaving, in Florence a female art, as when Athene was its goddess, was depicted as being done by a woman working at the loom, while another woman looked on. Law came next,—God the Father being sculptured as its source, from whom the legislator received both codes, the civil and ecclesiastical. Dædalus, or some man flying, followed the realism of the feathered body and of the hands inside the wings being unmistakable.



The panel representing the first boatmen on their experimental row, with dread and resolve alike on their faces, venturing forth on unknown seas, prophesied the navies of the world, the sailor's worth in the commonwealth being honestly recognised. Next came the art of war, which showed a slain man, the slayer standing with the expression of Cain in his countenance. After ploughing came the first charioteer, who knocked a rade cart together in the most practical manner. Then followed allegories of the arts, painting, sculpture, grammar, logic, rhetoric, and geometry (supposed to have been embodied in Euclid). Music, for the second time, was symbolised by Orpheus playing with his lute to birds and beasts. Arithmetic was represented by two patriarchs counting on their fingers; and the goldsmith's art symbolised with the small anvil and hammer, closed the series.

#### OBITUARY.

##### MR. JOHN CAROLIN, BUILDER.

AN octogenarian builder and citizen passed quietly from our midst, at his residence, 80 Lower Gardiner-street, on the 11th instant. Mr. John Carolin was partner with his brother for long years in the old firm of R. and J. Carolin, Beresford-place, Lower Abbey-street. Mr. Robinson Carolin still lives, enjoying a healthy old age, but retired from active duties. The deceased had also retired from business for the last few years, through increasing age and feebleness, but continued, while able to walk, to pay his visit to the old building yard and other favourite spots, the scenes of his former labours. The brothers Carolin were both throughout their business lives surprisingly sharp and active gentlemen, and never neglected for a day their duties. The firm was of old establishment, and figured in the building disputes between masters and workmen nearly half a century since. The firm during its time has carried out numerous building contracts of importance, and for many years was employed in works of building, alteration, and repair in connection with several Government and public departments. The deceased was interred on yesterday morning in Mount Jerome Cemetery.

##### SOCIAL REFORM AND THE WORKING CLASSES.

At the annual meeting of the 34th session of the College Historical Society, the auditor, Mr. James H. Campbell, Sch., B.A., gave expression to some healthy opinions upon phases of Modern Society. In the course of his inaugural address, he observed that undoubtedly the most prominent feature of late years in the domestic history of the British people had been a keen appreciation and a consciousness of social evils. The inquiries which this feeling had given rise to had revealed such a picture of widespread misery and wretchedness that men, imagining that these evils were of recent growth, prophesied national ruin as the inevitable result of the assumed degeneracy of the social state. But they had but to read the standard novels of the eighteenth century to feel convinced that they had advanced in every respect beyond their forefathers. To the erroneous belief in our social degeneracy was to be attributed what he believed to be the most discouraging feature of modern society, namely—the increasing tendency to supplant individual effort by appeals for Government aid, and by the formation of voluntary associations. Bastiat, the French economist, declared it to be his opinion that there were too many great men in the world, there were too many legislators, organisers, and instructors of society, conductors of the people, fathers of the nation, and such like. Too

many people placed themselves above mankind to rule and patronise it; too many persons made a trade of attending it. Detrimental as such interference might become when applied to politics, it became still more disastrous when it attempted to interfere with the moral and intellectual life of man. It was, therefore, on the formation of habits of self control and individual responsibility that they must rest their hopes of all permanent moral and intellectual progress. The advance of civilization had brought with it increased comfort and security to every class; but of these classes the one that had least benefited by this progress had been that of the working men. Modern society stood condemned, for it had debased the lower orders by its morbid philanthropy and its poor laws. There were, of course, many instances of unavoidable destitution, and these were its victims which society was bound to compensate, while it was also bound to see that none of its members absolutely perished from want of subsistence. But in the case of those who by indolence or dissipation had made their bed hard, society from a true spirit of justice and regard for posterity, should let them lie on it. Misery was not only the result but it was also the cure of reckless improvidence, and so surely as we attempted by artificial means to obviate the result, as surely would we hinder the cure.

Some exceptions were taken by one or more of the speakers who followed the auditor in respect to his views on what he termed "morbid philanthropy" and the action of the poor laws. Sir Robert Kane's remarks on the occasion were very appropriate, and we give a portion of them:—The nature of social progress, and the drawbacks by which that progress had been from time to time impeded, had been so ably described by the auditor, and ably commented on by the preceding speakers, that he could only express his full concurrence in the general principles which were enunciated. He felt, however, that the peculiarity of the present time, growing out of—as he felt it—in what Dr. Jellett had described as the exercise of the feeling of benevolence for its own sake, and as the fulfilment of a high moral duty, irrespective of economical considerations, though not entirely ignoring these. He did feel that they had fallen into a somewhat exaggerated idea of giving assistance to the poorer classes, and still more especially in regard to the criminal classes. The speaker related a circumstance which came within his own experience, in which the governor of a gaol told him of an inmate of the prison whom, do what he would for him, he found it impossible to satisfy. And what was this man? A burglar who had nearly killed the owner of the house which he had broken into. The whole study of the authorities of the prison had been to place this burglar in a position in which he would really be more comfortable than any honest labouring man with a wife and family to support. He did feel that in regard to the criminal classes their philanthropy had been pushed too far. With regard to the working classes, a good deal had been said about their improvidence, and of the miserable state into which they had fallen. He felt that there was a good deal to be said on the other side. Besides, were the middle classes so extremely provident, so extremely well conducted, as to be entitled thus to call in question the conduct of men in a social position inferior to their own, and to insist that these should be models of good conduct? The evils of strikes, he felt, could not be exaggerated, but in considering that subject they lost sight frequently of the point that the artisan classes were not always the most to blame. Take the case of a great coal owner, say, in the period of the coal famine, who took advantage of an increase of 15 per cent. to treble the price of coals, and in a few months by that means put into his pocket perhaps a million of money. Yet the public attributed the increase in the price of coals altogether to the obstruction of the workmen. As to the improvidence of the working classes, and their social condition, they were

not justified in concluding, from the reports of the police courts, that the enormous multitude of the labouring men in the United Kingdom were in the condition which these reports showed some of that class to be in. He would not refer to the deposits in joint-stock banks, for it might be said these represented the savings of the middle classes; but, taking the deposits in the savings' banks, he found that in 1865 the annual amount of the deposits was 11½ millions sterling, while in 1875 the amount was 18 millions sterling, while the total of the deposits for the ten years was 146½ millions. There might be cruelty, immorality, and drunkenness, but they must not shut their eyes to this evidence of provident habits among working men. They should endeavour to furnish the working classes with the means of innocent and intellectual enjoyments—remove from them the temptations of the tavern and the low gaming place, and put them in possession of elevating and intellectual enjoyments. They had the same instincts, the same capacity for social and intellectual enjoyments as they themselves had, and how would they themselves be if all the means of social and intellectual enjoyment were suddenly cut off from them? The auditor had also referred to the subject of excessive Government interference. It was certainly an evil, and one that should be resisted and could be resisted by the organisation of independent associations which might render themselves free from that amount of Government interference. It was to institutions such as this, to societies like those, to a university such as that in which they were now assembled, that society should look for the political and social education which might render them independent of any kind of bureaucratic despotism.

It is undoubtedly true that of late years there has been an excessive interference on the part of Government. There should be more individual effort and increased self-reliance. Voluntary associations and co-operative societies can accomplish much, if the legislature removes obstacles in the way of their action. There ought to be less appealing to the Government for aid, for state support naturally leads to centralisation, and consequent heavier taxation. If municipal bodies and local boards were properly conducted there would of late years have been less encroachment upon the public liberties of the people.

##### TRADE UNION CONGRESS.

THE following questions comprise the Parliamentary programme for the present year:—

A bill to amend the law of compensation in cases of accidents, so that workmen, or their families, may sue an employer in the event of injury or death from accidents due to negligence. A workshop regulation bill for women and children. The extension of the factory acts to bleaching and dyeing works. Reform of the magistracy, and the consideration by Parliament of what limit shall be placed upon the summary jurisdiction of magistrates, which deprive citizens of the right of trial by jury. (a.) The mode of appointing unpaid and unqualified magistrates. (b.) The irregularity with which the law is administered by the magistracy. Reform of the jury law by lowering the qualification for jurymen so as to admit a large number of workmen to the discharge of the important duties of jurymen, and thereby prevent the necessity of men serving as jurors so frequently, and provide a sum for reasonable expenses. The extension of the employer and workman act, 1875, to English seamen whilst in British waters. Reform of the patent law. Reconstruction of the small penalties act on the principle that imprisonment should only be used as a method of enforcing payment after failure of all other means, and as a last resort. An act to prevent truck by making compulsory weekly payments to workmen in the current coin of the realm. Codification of the criminal law. The prevention of unnecessary employment of soldiers in agricultural work. Compulsory certificates for men in charge of boilers and steam engines. Lessening the evils of the sweating system in the tailoring and shoe trades. The amendment of the smoke nuisance act.



### THE COMBUSTION OF REFUSE VEGETABLE SUBSTANCES.\*

HITHERTO there had been no opportunity of testing the value of such materials as straw, reeds, cotton stalks, brushwood, megass, &c., as fuel for steam boilers, from pre-conceived notions in favour of coal and wood, the use and efficiency of which were well known. But, in Hungary and South Russia, India, Egypt, the west and south of Italy, South America, and New Zealand, where coal and wood were scarce, the only way in which steam could be applied was by the employment of refuse vegetable products.

In 1872 experiments were made by the author and the late Mr. Schemieth, a Russian engineer, with a locomotive boiler adapted to a portable engine, in order to perfect the combustion of straw and other refuse. It was decided to inject the fuel automatically into the furnace, by an apparatus not unlike the feed motion of a chaff cutter. The chemical composition of various materials, in their ordinary air-dried condition, having been stated, the average proportion of calorific effect found in practice to exist between coal and other products, when used as fuel, was shown by the following figures: thus, 1 lb. of good coal, or 2 lbs. of dry peat, or  $2\frac{1}{2}$  lbs. of dry wood, or  $2\frac{1}{2}$  to 3 lbs. of cotton stalks, brushwood, or megass, or  $3\frac{1}{2}$  lbs. to  $3\frac{3}{4}$  lbs. of wheat or barley straw, would evaporate 8 lbs. of water in an ordinary tubular boiler. From calculations it appeared, that in England it would be five times as costly to use straw as to use coal under steam boilers. But these figures were materially altered in the countries named, where the cost of coal would be three and a-half times as much as that of straw. Taking an agricultural engine of 12 effective h.p., and the consumption of straw at 20 lbs. per h.p. per hour, the produce of straw per acre would enable the engine to work from twelve to eighteen hours.

A description followed of some of the earlier means by which straw had been burnt under steam boilers; as in Russia, by an adaptation of a brick furnace in a pit to the boiler of an ordinary portable engine, and in Hungary and in Wallachia where a modification of that system allowed of a shallower pit being used. In one of the most recent engines, which was capable of burning almost every description of fuel, the fuel was forced, by a continuous mechanical feed, into the furnace, in a thin stream in the form of a fan. The fresh fuel was practically held in suspension for a short time, which allowed the separate stalks to become immersed in the flames. The long pieces of straw, reeds, or brushwood had the effect of stirring up the half-burnt material in the furnace, and of keeping the whole in motion, besides permitting a free ingress of air. The apparatus, designed for feeding the refuse into the fire-box, consisted of a pair of serrated rollers, which, in the case of engines of from 6 h.p. to 20 h.p., were about 5 in. in diameter, and 18 in. long, placed at a minimum distance of  $\frac{1}{4}$  in. apart; but the upper roller was capable of rising, so that the distance between the rollers could be increased to  $1\frac{1}{2}$  in. The under roller was set in motion by a strap from the crank shaft of the engine, and both rollers, being connected by wheels with long teeth, made about forty-five revolutions per minute: when the engine was getting up steam, the lower roller was turned by hand with an ordinary crank. The rollers were set in a cast-iron frame, fixed to the boiler by a hinge. To the front of this frame was attached a trough for holding the supply of vegetable fuel. To test the practical value of the apparatus, and to arrive at the best proportions of heating surface and the best position for the automatic feeding arrangement, three engines, each of about 10 nominal h.p., were constructed by Messrs. Ransomes, Sims, and Head. Thus it had been determined that, whereas for coal the areas of the grate, the fire-box and the tube surfaces were 0.62 square foot, 2.8 and 15.24 square feet

respectively per nominal h.p., those dimensions were for vegetable products, 0.93 square foot, 4.3 and 21.82 square feet per nominal h.p. Also that tubes  $2\frac{1}{2}$  in. in diameter gave better results in the consumption of vegetable refuse than tubes  $2\frac{1}{2}$  in. or 3 in. in diameter, the size usually employed in the boilers of portable engines adapted for coal. It was next ascertained that when the fuel was injected into the fire at 5 or 6 in. from the top of the grate bars, the greatest economy was obtained, there being a more rapid combustion with less smoke than in any other position. The combustion could be maintained with vegetable refuse containing more than the natural amount of moisture, by forcing the fuel into the hottest part of the fire, and by supplying it alternately on the right and left hand sides of the fire-box, so that the fire on one side was always clear and bright. To prevent the deposit of silica and slag on the grate bars, the most efficacious system had been proved to be the use, underneath the grate bars, of a sliding rake with five or six teeth, according to the width of the fire-box; the top of the teeth projecting about 2 in. above the bars. When the tubes were furred, a steam-jet, consisting of a wrought-iron pipe with a brass rose at one end, was inserted through the flap in the front of the boiler, and the whole of the silicious deposit was blown through the tubes into the smoke-box. In an accompanying table the author gave the proportions and weights of different portable engines, varying from 4 to 20 nominal h.p., constructed on the system described, and fitted with a single slide valve, a single feed-pump and a branch pipe from the exhaust for heating the feed-water.

Modifications of the apparatus for burning cotton stalks had been applied to a tubular boiler, constructed by Messrs. J. and H. Gwynne, for supplying steam to a 12 nominal h.p. pumping-engine in Egypt; also, for burning megass, or sugar-cane refuse, in the furnace of one of the tubular boilers of His Highness the Khedive's sugar mills in Egypt, constructed by Messrs. Eastons and Andersen. The automatic feeding apparatus had likewise been adapted by Messrs. John Fowler and Co. to their steam ploughing engines, supplemented by a means for supplying vegetable fuel with a fork by hand, through an opening in the fire-box, fitted with a balance door, which closed immediately the fuel was inserted. The heating surface was much larger in these straw-burning than in coal-burning engines, while other alterations had been made: thus, the large driving wheels were in the forward part of the engine, under the centre of the boiler; the winding drum was under the smoke-box, in front of the driving wheels; the steering wheels were attached to a wrought-iron frame extending behind the fire-box. This frame, besides carrying the hind axle, served as the sides of the trough for holding the straw to be passed by the rollers into the furnace. The apparatus was driven by a pitched chain from the crank shaft. In Russia, during the year 1876, two of these engines, when ploughing 10 in. deep, had consumed, on an average, about 6 cwt. of straw per acre. The mean produce was about 2,750 lbs. per acre; dividing that quantity by 672 lbs.—the consumption in ploughing 1 acre—it was found that 4.09 acres could be cultivated with the refuse straw produced by 1 acre. Comparing this result with the steam-plough trials at Wolverhampton in 1871, it would appear that 1 lb. of coal was equivalent to 4.17 lbs. of straw.

The difficulty of obtaining reliable information as to the performances of other straw-burning engines, which had been brought out both in England and in the United States, had prevented a general notice of all the various inventions being included in the paper. In conclusion, the belief was expressed that as the demand for mechanical appliances increased, so would the difficulties of obtaining the "best" qualities of fuel for steam boilers in rural districts. It was thought, therefore, that the only method of rendering the use of steam power universal,

particularly for agriculture, would be to construct the boiler of the engine so as to utilise the local supplies of combustible material of every kind.

### ADVERSARIA HIBERNICA.

#### LITERARY AND TECHNICAL.

AMONG the rare books, pamphlets, and tracts, in the library of Dr. Willis, of this city, which came under the hammer last November, was a copy of an "Essay on the Antiquity and Constitution of Parliaments in Ireland," by H. J. Monck Mason. In the catalogue of this library an index finger draws attention to the value of this pamphlet, followed by these remarks:—"It is doubted whether this Essay was ever published; certainly it has neither bookseller's nor publisher's name. The public libraries of this city have been searched in vain for a copy, and diligent collectors of works on Irish History during many years past have been unsuccessful in their quest after it. Indeed, so little known or in so few hands has the work been, that it has become safe to quote it without acknowledgment, and with but little risk of detection. The author establishes by authentic evidence of legal records and other ancient MSS., that the Irish Parliament was almost contemporaneously with the first English settlement in this country, temp. Henry II., being nearly a century and a-half earlier than the age assigned to it by Sir John Davis. He also contends, contrary to previously received opinions, that title by prescription may exist in Ireland, and even a derogation of a common law right. If it was only from its importance in many cases now pending under the recent Act regulating Fisheries in Ireland, this statement and the authorities by which it is supported, would deserve the most earnest attention of all who are interested in that species of property which is now threatened with abolition."

The pamphlet of Monck Mason is certainly an able one, and its antiquarian, legal, and historical value is considerable. The present writer possesses a copy picked up some years ago, and there are in it several passages interlined. He believes that it originally belonged to the library of some lawyer in this city. He is now desirous of parting with the very scarce pamphlet, but if the Royal Irish Academy, Trinity College, or the British Museum do not possess a copy, the owner is open to an honourable offer for his literary "treasure-trove." Apart from this, we will afford the public a little more information anent this pamphlet, without fearing that its value will be injured. The catalogue of Dr. Willis says that it is doubted that the pamphlet was ever published. Well, it was printed in 1820, by William Felds, of 38 Great Strand-street, who was the father of John and George Felds, the former of the sons being the printer and publisher of the first volumes of the old *Dublin Penny Journal*. William Felds was the printer of the second volume of Hitchcock's "Historical View of the Irish Stage," issued in 1794, the first volume having been printed in 1788, by R. Marchbank, of 11 Dame-street. Mason's Essay is dedicated to the Right Hon. Henry Grattan, M.P., who died in the very same year in which the pamphlet was printed. The dedication is most appropriate, the author observing that "It would have been distressing to me, as a native of this Island, to have published anything upon the subject of Irish Parliaments, even although its scope were exclusively antiquarian, were it by that exclusion to omit the mention of your name. I, therefore, return you my thanks, for your permission granted me to affix it to this tract, which is an attempt to present some traces of the imperfect early constitution of an assembly, that was principally by your patriotic efforts, raised to hold, during an important period, its appropriate station in the British Empire. I am, Sir, with much respect to your public character, and grateful feeling for the frequent kindness I have received from you, etc." Had Mason's Essay

\* By Mr. John Head, C.E. Read at Institution of Civil Engineers (London), on the 30th ult.



(though not at all of a party-political character) been issued in the last decade of the Irish Parliament, it might have had a marked effect on the project of the Union, and have contributed powerfully to its defeat.

Of the author, H. J. Monck Mason, LL.D., M.R.I.A., we add here that he was the author of several other works. He held the office of librarian to the King's Inns for many years, and was the secretary to the religious Irish Society. While secretary to the latter body in 1843, his "Life of William Bedell, Lord Bishop of Kilmore," was written.

Before concluding this note we must candidly say that Mason's "Essay on the Antiquity and Constitution of Parliaments in Ireland" is bristling with facts and authorities in support of all he advances, and his style is clear and concise. After marshalling a host of authorities in support of his argument, Mason concludes on purely historical grounds "That the claim of the English Parliament to legislate for Ireland, however supported by practice, defended on authorities, or enforced by power, was unfounded in original right, inconsistent with the first establishment of the English here, repugnant to the inherent common-law principles of the English constitution, contradictory to charters, destructive of the king's prerogative, in flagrant violation of the statute law, neglected by the better opinions, unjust in its execution by nature, and absurd and inconsistent in its consequences; with all these fatal objections, we may fairly pronounce its exercise to have been an act of unconstitutional power, incapable of being ever legalised by acquiescence, or justified by example." Why, Molyneux's "Case of Ireland Stated," which was burned by order of Government by the common hangman, never stated reasons with such force as did Mason. Bishop Berkeley's famous "Queries" were in part published by the Young Ireland party in 1846-7, to add strength to their cause; and we would not wonder in the least to see the "Home Rule" party issuing a new edition of Mason's Essay, with notes and annotations by Isaac Butt, M.P. Irrespective of the passions of sect or party, the Essay under notice is well worthy of re-printing.

In one of the early volumes of the Transactions of the Royal Irish Academy, there is an account given by George Burrows, M.D., M.R.I.A., of the extraordinary case of a man who resided for some years in this city, who had a fistulous opening in his stomach. Our contemporary the *Lancet* or other of our medical journals may be inclined to take a note of the matter. The man was previously an inferior officer in the East India Company's navy, and during a voyage he received a wound from a blunt-pointed wooden instrument between the cartilage of the eighth rib on the right side, and the navel, penetrating the stomach. Much fever and inflammation followed, and continued for a long time. When they had subsided, an opening remained, through which when the tent was withdrawn a whitish fluid flowed out. The sides of the opening turned in and could not be got to unite. The extraordinary part of the case is that the man ever afterwards kept the orifice plugged up, never withdrawing the plug but to gratify curiosity, or place a new one. The opening was about a third of an inch in diameter. This rather strange patient was, when Dr. Burrows saw him, 65 years of age, and he had lived for twenty-seven years previously in the state described. He is described of extremely dissipated and drunken habits, and when sober employed his time in teaching French in this city. Although he had lost all his teeth with the scurvy he eat with good appetite and digestion. The liquids he took in part escaped through the opening when he withdrew the plug, and when his stomach was empty, a sweet whitish fluid adhered to the plug. He had no pain, and no food disagreed with him. Having suffered a good deal of poverty through intemperance, he became reduced in circumstances, gradually declined and died. In examining his body

after his death, the wound was found to have penetrated his stomach in the centre of the greater curvature, and from the adhesion of the liver, colon and integuments, a large structure was formed, which gave the appearance of a double bag, with the opening in the middle. The duodenum was enlarged beyond the size of the colon, and seemed to have performed some of the functions of a second stomach. The colon was firmly attached to the stomach by a ligamentous substance. All the other viscera were sound and natural.

The above is neither architectural nor archaeological, but to make it more germane to our advocacy, we will add that George Burrows, M.D., was the son of a respectable citizen of the medical profession, and brother of the Rev. Dr. Robert Burrows, of Trinity College, who was also a member of the Royal Irish Academy. George Burrows studied in the Dublin University, and afterwards spent some time in Paris and Leyden. After his return to his native city, he followed the pursuit of his profession, and evidenced distinguished abilities. He was the author of several papers in the early Transactions of the Royal Irish Academy. His life was cut short by putrid fever, in 1793, caught in dissecting a subject in the House of Industry in this city, to which he was physician. Others of his name and family deserve well of our countrymen.

In those days of demonstrative efforts in the direction of technical education, it is well that we should look back and see, and severally acknowledge the efforts made in the same fields nearly a century since. In the 4th volume of the Transactions of the Royal Irish Academy, there is a prize memoir by Stephen Dickson, State Physician, entitled an "Essay on a System of National Education adapted to Ireland." The subject is discussed under a number of heads: Of education as it concerns health; of education as it promotes morality; of education as it relates to instruction in the knowledge requisite for the several departments of society. 1st, the elementary instruction of the children of the labouring poor; 2, of instruction in agriculture; 3, of instruction in mining; 4, of instruction in manufactures; 5, of instruction in professional and polite literature. Now all these projected courses of education have been developed and carried out within late years. The Elementary Education Act in England since 1870 has led to the establishment of School Board Schools over England and Scotland. We have model farms for several years in Ireland. We have Art Schools and Schools of Science, and, better late than never, there are technical schools and workshops springing up in England, where young men may learn the principles of their trades, and older men unlearn their "rule of thumb" methods by practical application of the principles of geometry to handicraft construction and art. The workmen of this country will need to wake up, drink less, and study, work, and save more.

H.

#### PATENTS FOR INVENTIONS.

In the House of Commons, on Monday, the Attorney-General for the sister kingdom asked leave to introduce a bill for the consolidation and amendment of the law relating to inventions for patents. It was in many respects a similar measure, though not identical, with that introduced in the session of 1875 in the other House. The great object was how to secure the greatest possible benefit to the original inventor without detriment to our manufactures. At present our patent laws were anything but perfect, and this bill would endeavour to amend them by making stricter provision as to specifications by giving more complete opportunities to parties to oppose the granting of a patent, and by appointing a body of examiners who should investigate the specifications for the purpose of ascertaining whether the invention was

subject-matter for a patent, and reporting whether or not in their opinion the specification disclosed a contrivance which was a novelty. The examiners would also report as to whether or not a patent should issue, but their decision would be subject to appeal. After a patent had been issued the patentee may be ordered by the Lord Chancellor to grant licences for its use in manufactures, &c., at reasonable rates; and in case of non-compliance with such order the patent might be revoked. The Crown rights over patents would be more clearly defined, and the bill, whilst giving the Government full power to make use of any patent, would provide for due pecuniary compensation to the patentee. The patenting of foreign inventions by other persons than the inventors would not be permitted under this bill. Patents would in future be for 21 years instead of 14, but the present power of getting them prolonged would be abolished. As regarded expenses, it was proposed to diminish the first charge of obtaining a patent from £25 to £12 10s., but it was not intended to reduce the duties payable at the end of the third and seventh year. It was further intended to place an additional duty on the right to extend a patent to 21 years. In conclusion he begged to say they proposed to add to the number of commissioners by the appointment of the law officers for Scotland and Ireland, and a number of gentlemen of experience not connected with the law. Mr. Dillwin thought that some of the proposals sketched by the Attorney-General would not work, and further, that they would be a discouragement to patentees. Mr. Mundella considered there were other provisions which seemed likely to kill inventions and to reduce the number of patents to a minimum. He was quite sure that in the clause empowering the Lord Chancellor to enforce compulsory licences lay the whole mischief of the bill, because it placed the poor inventor practically in the hands of the rich manufacturers. He advocated that there should be an international system in regard to patents, as in the case of trade marks, under which the privileges of an inventor would hold good abroad. The sum of £50 required by the bill for the renewal of a patent at the end of the third year, was, in his opinion, exorbitant, and he advised the Government to fix the payments at £1 or £2 for every year during the existence of an invention; believing that by such a change they would realise a larger revenue and would greatly benefit the individual interests of the country. Sir G. Bowyer objected to the expense inflicted upon inventors for a huge piece of parchment and a great seal of wax, when a simple certificate like those given in France and Belgium would answer every purpose. The proposed examinations, too, were, in his judgment, totally unnecessary. If a man could show an intelligible and feasible specification, a patent should be immediately given him. Mr. B. Samuelson supported the bill, with the exception of that part of it which provided that a patentee was to be rewarded when his invention was used by the Crown. The Treasury, as the authority charged with the restriction of the public expenditure to the utmost possible extent, was scarcely a body thoroughly to be relied upon for doing strict impartiality between the Crown and the patentee. Mr. Anderson advocated the adoption of some nearer approach to the American system. He thought especially that the expense of getting patents should be reduced. The Attorney-General, in replying, expressed doubt as to whether the American system was as good as some people thought. Leave was given to bring in the bill.

THE CABMEN OF DUBLIN.—Over thirty car and cabmen were prosecuted by the police for having their vehicles in a neglected, dirty state, for obstructing the thoroughfares by keeping their vehicles in double lines at the car-stands, for demanding illegal fares, and for using insulting and abusive language to persons who wished to hire them. Fines ranging from 2s. to 10s. were imposed.



## LOCAL MUSEUMS AS A PART OF NATIONAL EDUCATION.

On the 2nd instant, a meeting was held at Manchester, to promote the building of a New School of Art in connection with a Museum of Fine Art. Sir Henry Cole, K.C.B., attended, and submitted some very useful suggestions, which we reproduce for the benefit of our readers:—

Public Museums, to be as useful as possible to the general public, to students in Art and Science, designers, artists, &c., ought to be in direct connection with Schools of Art and Science. Each gives vitality and strength to one another. The present great public desire for Local Museums has arisen naturally from the creation of these technical schools, and the facts which have helped on this desire should be borne in mind.

At the first establishment of Schools of Art (originally called schools of design) Parliament voted £10,000 to purchase examples of paintings, sculptures, bronzes, &c., to be used in the schools.

When Marlborough House was used provisionally as the first museum in 1852, illustrating the connection of fine art with productive industry, a minute was passed by the President of the Board of Trade, the Right Hon. J. W. Henley, in May, 1852, by which grants of half the cost of works of decorative art were sanctioned for Schools of Art to induce the schools to buy them towards forming museum collections. As late as May, 1869, the Marquis of Ripon, as Lord President of the Council, passed an important supplementary minute with the same object.

Between 1853 and 1875 a system of loans from the Kensington Museum has been in active and successful working, and when I was secretary, grants of 75 per cent. for the purchase of objects necessary for art instruction were made to schools. Up to 1875, 26,900 objects had been lent to museums, schools, and exhibitions, which have been attended by more than six millions and a half of persons. Hitherto, all attempts have been fruitless to induce the British Museum and National Galleries to concur in a system of placing their superfluities in local circulation.

Building grants not exceeding £1,000 are made towards the erection of Schools of Science and Art, by which space in the structure necessary for exhibiting specimens is allowed. So much for direct State assistance to local museums.

As respects the action of local authorities, Mr. Ewart's Amended Act of 1856 sanctions the levy of a rate not exceeding 1d. in the pound to be devoted to the support of Museums and Schools of Science and Art, and the power has been used in some few places.

Since the passing of the Education Act in 1870, local rates may be levied for the support of elementary schools, and it may be foreseen that, in small places, free libraries, museums, and laboratories, and the like will be connected with the schools. At Birmingham, one of the Board schools is about to have a kitchen for teaching cookery.

Schools for elementary education, as well as Schools for Science and Art, are now supported by three respective means applied in different degrees—(a) State grants; (b) local rates; and (c) the fees of the students with some voluntary donations. The same principles are obviously applicable to the support of local museums.

The chief, and perhaps the most serious difficulty in establishing a local museum, is the building. Building grants are no longer made to elementary schools, but they might well be augmented for Museums and Schools of Art. The next difficulty is an adequate maintenance fund. The supply of examples will come by gifts and purchases, especially of reproductions aided by Government grants.

Thus it is shown that the three principles of support which now regulate the management of public elementary schools would exactly suit that of Public Museums.

An effort should therefore be made to induce Parliament to entrust local authorities to raise sufficient rates in aid, and such authorities might be municipal corporations or school boards, or a union of members of the two.

Donations would certainly come in aid of the buildings and purchases, and endowments of maintenance.

As respects the specimens permanently exhibited in museums, they would vary in kind and extent according to the size of the place. The acquisition of objects of natural history, illustrations of machinery, and technical processes, and practical science, need not entail great cost. But original pictures, especially very fine ones, would cost much, and so would objects, such as bronzes, enamels, potteries, ivories, &c., illustrating fine art applied to productive industry. The highest class of an-

cient original works can hardly be obtained, but copies of them could be readily procured, and would really serve as well as originals for the pleasure or instruction of the general public. In the production or reproductions, a co-operative administration would be almost indispensable, besides being by far the cheapest mode of action. At least six large local museums should each possess a copy of the finest Raphael, Michael Angelo, Titian, Albert Dürer, and Holbein, and the Science and Art Minutes in my time used to make grants to half the cost of such reproductions; so with casts of fine works in marble, sculptures, bronzes, &c., which would be made by various methods.

## "THE PHYSICAL FEATURES OF IRELAND."

THE third of the series of Afternoon Lectures was given yesterday by Prof. Edward Hull, F.R.S. Many years ago, he said, the distinguished "father of Irish geology," Sir R. Griffith, had graphically described the physical features of this country in the report of the Railway Commissioners, stating that these features consisted of a central plain of limestone, bounded in nearly every direction by mountains, and drawing attention to the remarkable headlands of the harder rocks which jut out into the Atlantic, and including bays of limestone. The lecturer considered that the mountains of Ireland might be arranged in five groups—the N.W. Highlands of Donegal and Derry; the Western Highlands of Galway and Mayo; the S.W. Highlands of Kerry and Cork, culminating in Carnatua 3,404 ft., the highest point in Ireland. The S.E. Highlands of Wicklow, and the N.E. Highlands of Carlingford and Mourne, culminating in Slieve Donard, 2,796 ft. The lecturer adduced evidence for believing that the Highlands of Donegal, Mayo, and Galway, and of Wicklow belonged to the same geological age, viz., a time intermediate between the Lower and Upper Silurian Periods. They were vastly more ancient than the Alps, Pyrenees, or even the Himalayas, and they were formed of similar rocks to those of the Scottish Highlands, and these two ranges were but prolongations of one another from below the waters of the Atlantic. The rocks were greatly altered, or metamorphosed from their original condition. At the close of the lecture Sir Robert Kane tendered Professor Hull the warm vote of thanks of his audience.

## HOME AND FOREIGN NOTES.

ROYAL HIBERNIAN ACADEMY.—The annual exhibition of painting, sculpture, and architecture opens to-day. His Grace the Lord Lieutenant and viceregal party will be present at three o'clock.

THE CAXTON CELEBRATION.—The inaugural meeting of the Caxton celebration is fixed for next Saturday, at the Jerusalem Chamber, Westminster Abbey, when the Dean of Westminster will preside.

ARCHITECTS' INSTITUTE.—A deputation from the Royal Institute of the Architects of Ireland will attend at the Castle to-morrow at twelve o'clock, for the purpose of presenting an address to his Grace the Lord Lieutenant.

BETTER LATE THAN NEVER!—A meeting of the Municipal Council is summoned for to-morrow at three o'clock, for the purpose of considering the advisability of putting in force the provisions of the Public Libraries Act, 1855.

THE PUBLIC HEALTH.—The last report to hand from the Registrar-General informs us that Dublin still holds its place at the head of the death rate, the total deaths registered during the past week being 31.9 in every 1,000 of the population. In London the rate was 22.2; in Glasgow 26.6; and in Edinburgh 16.2. We hope for an improvement, when the new officer is appointed, and our streets swept once a month!

ELEVATED RAILROAD, NEW YORK.—From the *Financial Chronicle* of the 13th ult. we learn that the net earnings for the month of October of the New York City Elevated Railroad Company were 10,650 dols., or at the rate of 127,800 dols. per annum. The line is 7½ miles long, including sidings, and cost in round numbers about £64,000 per mile. Its capital stock amounts to 1,050,000 dols., and the bonded and floating debt 1,412,000

dols., so that at the above rate the earnings upon the total amount of capital are, at this early stage of the railroad's existence, upwards of five per cent. Contrast this with underground railways in London, which are 16 miles in length, and have cost upwards of £13,000,000, or about £848,000 per mile, the difference per mile being £784,000.

NAVAL ENGINEERS.—The increasing scarcity of assistant engineers in the Royal Navy, and the total failure of the experiment lately tried by the Admiralty of inviting young engineers trained in private workshops to compete for twenty vacancies in the naval service, will compel the authorities to, ere long, set about in earnest the reorganisation of this important branch of the Navy. There was, it appears, no lack of candidates for the vacant appointments. About a hundred and forty commercial engineers sent in their names. A hundred presented themselves for examination; but of these eighty-three retired as soon as they saw the papers set. Seventeen began to work at the problems; but in the afternoon the number was reduced to seven, who persisted to the end. How many of these succeeded in proving themselves duly qualified we have not yet been informed. The question naturally suggests itself whether it is necessary that the subordinate officials in the engine-room should possess the amount of theoretical and scientific knowledge at present considered requisite. If it is, the Admiralty must be prepared to largely increase the pay and improve the position of the engineers of the Navy. But is it absolutely necessary that every assistant in the engine-room should be such a scientific theorist? There are but few such men in our large ocean merchant steamers, and yet the engines of these powerful vessels so rarely go wrong, that it may be said that they are never out of order. Can as much be said of the machinery of our men-of-war? There must be undoubtedly on board every large ship one skilled and scientific engineer—a man conversant not only with the practice, but also with the theory of his profession; but below him we would place, instead of the present numerous body of engineers and assistant engineers, a staff of skilled mechanics and artificers, and of men practically conversant with the working of engines—men of the stamp and qualifications employed in the engine-rooms of the ships of our great steam companies. To employ educated gentlemen to perform the ordinary routine work of taking care of engines, is a proceeding similar to that of using a finely-tempered razor to cut up wood.—*Broad Arrow.*

## TO CORRESPONDENTS.

SANTAS.—The house property to which you and others have directed our attention is owned, we are informed, by certain T.C.s. and officials of the Corporation. The sanitary sergeants are too wise awake to take notice of what might vex some of their masters to be known publicly.

B.A.—The subject is alluded to in present issue.

MARBLE MASON.—See a copy of the Dublin Directory. ALDBOROUGH HOUSE.—Can any of our readers state who was the architect of this building? We do not remember seeing the name of the architect stated in any of the notices of the house that occurs in books, guides, or periodicals published from time to time in this country. Aldborough, as a title in the peerage of Ireland, has, we believe, lately become extinct.

RECEIVED.—Tolka—H. R.—J. D.—C.E.—A Builder—M.A.—R. H. A.—T.C.—O.B.—Q.—&c.

EPPS'S COCOA.—Some time since, in a series of articles in these columns upon food, we spoke in terms of unqualified praise of Messrs. Epps and Co's "Prepared Cocoa." The opinion we then expressed as to its purity and nutritious qualities has been fully endorsed by the public, as shown in its increased and steadily increasing consumption. We believe that Messrs. Epps's Manufactories are now the largest of the kind in the three kingdoms, and the total quantity of "Prepared Cocoa" consumed at the present time approaches four millions of pounds annually. This result is not surprising. The dietetic properties of native cocoa are well known, but in the form prepared by Messrs. Epps, Homoeopathic Chemists, they are rendered additionally valuable, both on account of their increased nutritive power and digestible character.—*Civil Service Gazette.*

## NOTICE.

Correspondents should send their names and addresses, not necessarily for publication.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

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THE IRISH BUILDER.

VOL. XIX.—No. 413.

THE POSITION OF OUR WORKING CLASSES.

 WITHIN the past thirty years a great revolution has taken place in all matters affecting the working classes of the three kingdoms. Though Ireland may have been less affected by the social reforms accomplished, yet the progress made in many directions is tangible and visible. We are, to be sure, far behind England, and even Scotland, which has a much less population, from the fact that we are more of an agricultural country than a manufacturing one. There are philanthropists and well-wishers in our midst, who think we are to be congratulated, and that pursuits of agriculture and the rearing of flocks and herds is more suitable employment for our people, and that manufactures carry with them much evil and demoralisation in cities and towns.

Despite of what may be written in favour of agricultural pursuits, we have always held, and still hold, that it is absolutely necessary for the future prosperity of this country that manufactures should be more widely and extensively established and carried on. We are not looking upon the question from any political point of view, but from a common-sense one, for, though we are all dependent on the soil for our sustenance, it is through manufactures and the employment of skilled labour the country can be made really prosperous. In the increased earnings of our industrial and working classes, if properly husbanded for the future, will be the real foundation of our national wealth. Capital has hitherto always commanded labour; but it must be remembered that labour, steadily and judiciously applied, is the foundation of capital.

A very suggestive speech was lately delivered in Liverpool by William Rathbone, M.P., dealing with the increased earnings of the working classes, and their effect on themselves and the future of the sister kingdom.

Much of what was said is as applicable to the working classes of Ireland as of England. Through increased earnings the working classes generally, and the artisan classes particularly, have for several years back been receiving a much larger share of the income of the country than had previously come into their hands. It certainly depends to a great measure upon themselves whether for some years to come they will not still continue to receive this increased share.

The question may be asked here, as it has been asked in England, Are the working or artisan classes making any good use of their increased earnings; are they saving for a "rainy day," laying up a portion of their earnings, or spending it improvidently? The middle classes, and even a portion of the tenant farmer class, have indeed, as investments show, been husbanding their resources; but our savings banks, friendly, and building societies in this country do not show that the artisan element has a thought for the future, save in rare instances. The English working classes to some extent are saving, though not to an extent to suggest hopeful prospects. The Scotch are more thrifty, but the French working classes are a model for their brethren in the three kingdoms.

There are many friendly and building societies, and the objects of both are excellent where honestly carried out. The former societies have done, and are still doing, much good; but facilities afforded by the latter societies have not been availed of to any large extent of late years by the working classes, though it was for their particular benefit they were originally projected. In the few instances of successful building societies in this country, it has been the middle and tradesmen classes, and clerks and warehousemen, who availed themselves of these societies for saving purposes, or for obtaining a home that they could in future call their own.

We remember the time when wages in the building trade were so low in Dublin that good carpenters in many instances only received from 15s. to 20s. per week, from six till six. First-class joiners, masons, bricklayers, plasterers, and other operatives, were to be had for 24s. per week, and this was between twenty-five and thirty years ago. Building operatives are now receiving nearly 40s. per week, and we regret to say in this city on the whole they are nearly as improvident as ever.

The majority of our artisan classes are still housed in unventilated tenement houses, with two rooms in many instances for each family, and in some instances only one room. In several instances in this city we have found the unskilled labourer occupying better apartments than the skilled and higher paid worker, and in not a few cases found the labourer more saving than the artisan. Monday still is, to a great extent in Ireland, the artisan's holiday, and it would be instructive if we could furnish the amount of money lost through this pernicious and idle habit. It no doubt amounts to many thousands of pounds in the aggregate, made up of four, five, and six shillings, and higher sums, representing a day's wages. Added to this lost money, is that spent in drink on this so-called holiday, or idle day, which amounts to some thousands more lost to the country. It has been calculated that if a building operative on entering life worked instead of played on Monday, and put by his Monday earnings, he

would, when he was thirty years of age, be able to live in a house of his own, and at the age of sixty he would not only have a house of his own, but £1,200 in the bank as a reserve fund. What the exact amount spent yearly in intoxicating drinks in Ireland, we have not figures at our hands just now to show, but the largest proportion is undoubtedly spent by the working classes. In 1875 in England it has been shown that £142,000,000 was spent on intoxicating liquors, being £11,000,000 more than was spent in the same way in the prosperous year of 1872. An excess of consumption was also shown to have taken place in the quantities of tea, tobacco, and other articles chiefly used by the working classes. We do not mean to say that the middle or upper classes do not consume a large amount in higher priced drinks than the working classes, but this affords no excuse for the improvident habits of the working classes, who if they do not save while in health and bodily vigour, have nothing to look to in old age but the poorhouse.

It behoves, then, the working classes, on the whole, to husband their resources. The legislature and public opinion have done much for them of late years. Year by year the disabilities which affected them politically and socially are being removed; they are getting more political power into their hands; there are greater facilities now for the education of their children, and special acts have been passed, which if carried out by municipalities and local boards, will enable them to obtain more healthy and comfortable homes. But apart from the action of the legislature, it is their duty to help themselves, and make the small effort, which may be accomplished with a little self-denial on their parts, of obtaining houses which they may call their own.

Every trade almost is now affected by the application of machinery. Contrary to the expectations, and belying the fear of the artisans of the building trades, machinery has not injured the workmen of these branches, but greatly benefited them. Much laborious labour has been done away with, the hours of labour are reduced, and more instead of less hands are employed. We do not deny the right of working men to sell their labour at the highest possible price, but we are, and have been always, adverse to strikes and "lock-outs," believing that they are fraught with dire evils. They engender ill feelings between employers and workmen, and give facilities for foreign competition. Continental countries are now under-selling manufacturers in the British Islands in several branches of trade. Some trades, or branches of trade, are disappearing from our midst through the organization of labour abroad. Baltic timber, mostly in logs, came formerly into the ports of London and Dublin, and other ports, and was then sawn by our timber merchants. We are now not only receiving this timber in the shape of planks from abroad, but it is actually manufactured into joinery and other work ready for use. Foreign competition is driving in the thin end of the wedge, and the innovation will not only affect our native manufacturers, but our building and other workmen.

The English coal trade is becoming also affected by foreign competition, and some lay the chief fault of this on the combination of miners and colliers in the British Islands through the high wages they have demanded during the last few years; but we think the



workmen in these countries are not altogether to blame, for there are other causes at work.

It is clear, however, that in countries where much lower wages are paid to workmen, capitalists can afford to compete with British employers. We must honestly admit, on the other hand, that the purchasing power of twenty shillings, a quarter of a century since, was more than twenty-five shillings at present; and that, in articles of food and house rent, the working classes do not stand on such advantageous footing as formerly. British manufacturers will, as time advances, and while a free trade exists, have to face a still fiercer competition than at present prevails; and it is not at all unlikely that workmen's wages will decrease in course of a few short years instead of increasing. The wages of labour to a large extent are at present coming, not out of the income of the country, but out of its capital; and this process cannot continue without proving eventually most injurious to the prospects and position of the working classes. The only way to meet the evil successfully is by thrift and saving habits on the part of workmen. What they save and invest will not only benefit themselves and their children in future, but will benefit the country, increase its prosperity, and assure their brethren fair and remunerative wages. Government ought, undoubtedly, to give greater facilities to workmen and others for investing money in the public funds, and remove every difficulty in the way of safe investments in lands, houses, &c., and the transfer of land should be made as small and cheap as it is on the Continent.

Our banking system in England and Ireland needs to be reformed, and made as popular as it is in Scotland. In the latter country the deposits of working men are much larger than in England,—one inhabitant in every thirteen in Scotland to one in every twenty in England is a depositor in the savings banks.

In conclusion, we would like to see our working men husbanding their resources, putting by weekly ever so little, that they may be enabled in the course of a few years to become not only well employed workmen but capitalists as well. Every workman might, and should, live in a house that he might call his own, besides being an owner to some extent of money in the public funds.

While money continues to be wasted on intoxicating drink, and wasted by loss of time in addition, and where nothing is saved in a lifetime, nothing is gained by the country or the individual but ruin and pauperism.

#### WREN AND PUGIN, OR GOTHIC REVIVAL AND CLASSIC REACTION.

WE have had the "Decline and Fall of the Roman Empire" described by a philosophic Gibbon, and the "Rise and Fall of the Irish Nation" graphically sketched by a Barrington, and now we have the "Decline and Fall of British Architecture" traced by a Bentineck. The Right Hon. G. C. Bentineck, M.P., is a daring man, and he has essayed an ambitious task, in the performance of which he has evidenced talent and a general acquaintance with the architectural opinions of the day. How far he is otherwise qualified to pronounce so dogmatically as he has done, a

short time will probably show. There is a certain vigour and boldness in his opinions, and no doubt he charmed several of his audience, if he did not astonish them, by his lecture at the Whitehaven Scientific Association on the 6th ult. We may reproduce his paper, but it is sufficient to state here that Mr. Bentineck lays the fault of the decline and fall of architecture at the door of the "Gothic Revival," and on the devoted head of the late Augustus Welby Pugin he pours out the stream of his unmitigated censure. Pugin is described as "the true author of the pseudo-Medieval movement, which sits like a nightmare on the art of this country, and paralyses its life and energies." Pugin will not lack able defenders; and we cannot resist the conclusion that throughout his paper Mr. Bentineck has made a number of rash and unjust assertions, and, while unable to ignore the great abilities of that architect, has endeavoured to damn him with faint praise. The character and creed of Pugin, and the unfortunate calamity that overtook him, were matters that might have been judiciously left out of Mr. Bentineck's paper. If his object is to create a reaction in favour of the Classic style, he could have obtained his purpose by a different treatment of his subject.

Sir Christopher Wren was doubtless a great architect; but anyone who has read his literary works, and examined his architectural ones, must admit that he knew very little of the principles of Gothic architecture, though well versed in the principles of building construction as applied to the school of architecture to which he belonged, and on which he shed a lustre which will long remain undimmed.

We are enemies to the modern "restoration" craze, which, in the majority of instances, has led to the destruction rather than to the restoration of many of our once beautiful Gothic structures; but Pugin is not to be blamed for this. To say that the works that Pugin professionally executed are all in a greater or less degree signal failures, is to say what is not a fact. He may not have eminently succeeded in all his works, no more than Sir Christopher Wren in respect to his many London churches, some of which were poor enough specimens.

Pugin, when he commenced the work with which his name will be for ever associated, had to passionately and persistently preach his principles, educate his party, instruct his workmen,—in a word, to almost prepare everything. Gothic architecture was gone out of use, or so debased that it needed a prophet's voice and an inspired tongue and pen to enlist any interest in its regard. Pugin succeeded, and there is a large following at present within the circuit of the British Islands who, irrespective of sect or party, untinted by bigotry, and uninfluenced by unreasoning prejudices, are proud of their master.

We are not wed to the Gothic style, no more than to the Roman or Grecian; but we are lovers of harmony, beauty, and proportion, no matter in what style we find them. We, however, look to the fitness of things, and judge of every style by the standard of suitability to the purposes for which it may be applied. There are shams perhaps in connection with all styles of architecture, and great pioneers in all ages must expect to have their detractors. It is not difficult to develop a talent to criticise, and it often

exists where there is no genius to create. What has once been accomplished can be accomplished again and improved upon, but it rests not altogether with architects. Unfortunately in the present day they have to design down to a standard of construction and ornament that finds favour with the tastes and pockets of clients, instead of having an unrestricted will in designing up to a standard of excellence, or comparative excellence, which they would in many instances only be too glad to do. On the whole, we are of opinion that architecture has not declined in the British Islands in this (nineteenth) century, but has greatly improved. Speculation is rife—unprincipled speculation,—and where so much is sacrificed to the god of cheapness, there must be bad building and sham architecture as well as other shams.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

SOMEWHAT elated with success, Sheridan exerted himself to make the succeeding season as attractive and profitable as the previous one. New engagements of consequence were entered into. When Macklin's agreement terminated, he left Dublin for Chester, where he opened a temporary theatre, and performed for several months with a very good company which he managed to collect. The season opened in Smock-alley on the 19th of September, 1750, when a very pleasing actress, we are told, from Drury-lane Theatre, made her appearance in the person of Miss Cole. She acted the parts of Isabella in the "Busy Body" and Miss Lucy in the "Virgin Unmasked." In addition to the attractions, there were Monsieur Billioni and Madame Paget, two capital dancers, and Monsieur Grenier and Miss Baker, altogether forming, it is said, an excellent group, and affording "great entertainment." The principal novelty, it appears, was Thomas King, then a very young man, who was brought over from Drury-lane. Even at this early stage of his career, he was allowed to possess an extraordinary degree of merit, and was deemed by the manager and play-goers here, as a valuable acquisition to the Smock-alley company. His first appearance in Dublin was in the character of Ranger in the "Suspicious Husband," and he was well received. After a short time he became the pet of the Dublin public as a comedian, and remained several years in this city, adding yearly to his reputation, and gaining more and more the esteem of our people.

It is somewhat singular, as we remarked before, how many English actors have made a name and a reputation on the Dublin stage in the eighteenth century, how cheerfully they were encouraged, how rapidly they rose to distinction, and how soon they were coveted and sought after by managers in their own country who had received them coldly years before. The old Dublin stage must have been an excellent school for young actors and actresses who had any genius or stamina in them, and they never lacked encouragement at the hands of a Dublin audience if they once exerted their best to please them. We will not stop to inquire at present as to the principal ingredients of this success, whether it arose from playing up to the critical standard of excellence which was very often exacted by a Dublin audience, or playing down to a passionate and patriotic interpretation of national feelings. No doubt it was in part owing betimes to both causes, according to the character of the tragedian or comedian and the applicability of passages of the play and the manner of their utterance by a popular actor. There is a sympathy more or less always between the actor and his audience, and once he be-



comes a favourite the sympathy is stronger, more particularly if the play in any part has a national application.

Let us see how Thomas King is spoken of by his contemporaries and others, for, born in 1730, he lived on till a ripe age, dying in 1805. His abilities are thus estimated in the "Life of Sheridan":—"No one could deliver such dialogue as is found in Lord Ogleby and in Sir Peter Teazle with greater point than Mr. King. He excelled in a quiet sententious mode of expressing feeling and sentiment. There was an epigrammatic style in everything he uttered, for although he could, when occasion required, give rapid utterance to his thoughts, he seemed generally to dwell upon his words, and then make all the happy points tersely and cleverly. His voice was musical, his action slow, his countenance expressive of benignity and yet firmness. He had the reputation of speaking prologues and epilogues better than any actor of the day, rendering them, when written with little dramas, perfect in themselves. His delivery in the couplet was in the true spirit of poetry, and without any mixture of buffoonery or mimicry. He painted the ludicrous and the gay with great felicity and tact." Dibdin writes that "It is difficult to liken King to any English actor. Those who performed characters in his style at the time of Ciber seem to have been followed by Yates, who, though he was an admirable actor, had a manner perfectly distinct. King is a performer who has thrown novelty into old characters, consequence into new, and nature into all. Indeed, his leading feature is integrity, which quality having been invariably his guide during his whole public and private conduct, he has most respectably endeared himself to the world in general by a display of truth and nature from the stage, and to a large circle of admiring friends, by an exercise of benevolence, good humour, and every other social virtue." This is high tribute to an actor, though it relates to a later period of his life than when we have introduced him. Boaden's portraiture of King as an actor and a gentleman is also a high one, and it was given in these words:—"King had been an actor for the amazing period of fifty years. His first appearance was in Alworth in the "New Way to Pay Old Debts," on the 19th of October, 1748. King had more of Garrick's friendship than any other actor enjoyed. He was respectful, but never servile before his great master, who sent him his dress foil when he quitted the stage as the legacy of professional death. I saw him from the pit, and he played the character (of Sir Peter Teazle) extremely well, and as the language was quite perfect, King had a habit of repeating without voice everything addressed to him by another actor, so that he never remitted his attention to the business for a moment. His lips were always employed, and he was probably master of the language of every scene he was engaged in. His old men have been supplied with kindred and sometimes equal power; but his saucy valets have never been successful." Charles Lamb also speaks in favourable terms of King's acting. The sarcastic Churchill thus alludes to King:—

"Behind came King,—Bred up in modest lore,  
Bashful and young, he sought Hibernia's shore;  
Hibernia famed 'bove every other grace,  
For matchless intrepidity of face,  
From her his features caught the gen'rous flame,  
And bid defiance to all sense of shame  
Tutor'd by her all rivals to surpass,  
'Mongst Drury's sons he comes, and shines in brass."

Hitchcock, in his "View of the Irish Stage," also bears evidence to King's virtues and abilities, and the esteem in which he was held by all who were intimate with him.

In the early part of the season of 1750, James Robertson, a native of this country, made his first appearance on the boards of Smock-alley. Although his name is passed over in several works, he is entitled to notice here. According to Hitchcock, his first appearance in Dublin was the first upon any stage, when Robertson performed the little comic part of Snap in "Love's Last Shift." The same authority informs us that Robert-

son was descended from a respectable family, and received a liberal education. He assisted in compiling, when a young man, the volume known as the "Universal History," and we are told that with the profits arising from this work he purchased an annuity for his wife, whom he tenderly loved, but whom he lost a couple of years after. Chance brought him to York Theatre, at which, it may be remarked here, Hitchcock himself had been once a performer. At the York Theatre, Robertson continued for upwards of twenty years. During his stay there he devoted his spare time to literary pursuits—writing novels, tales, prologues, epilogues, &c., some possessing merit, but now seldom noticed. Robertson's abilities lay chiefly in the comic line, in which Hitchcock thinks few excelled him. He retired from the stage several years before the close of the eighteenth century, and lived to an advanced age, enjoying a moderate competence, and the esteem of a number of friends, who appreciated his abilities and personal character.

The receipts of the season at Smock-alley did not turn out as good as the preceding one, but they were on the whole not considered bad. Mossop and Digges played with success, although their novelty with the town was somewhat worn off. The regular playgoers were beginning to grow athirst for new men and new scenes, though not dissatisfied with the acting of their favourites. Ere the season closed, misunderstandings sprang up between Sheridan and Mossop, and the latter left Dublin abruptly, and entered under the banner of Garnett, at Drury-lane; Mossop, with all his abilities, had a will of his own, and betimes it was difficult to work in harness with him. In losing Mossop, Smock-alley certainly sustained a loss at the time, but Sheridan, by other engagements, soon supplied his place, and amply satisfied the public. The following anecdote, illustrative of Mossop's capricious temper, is given by his friend and school-fellow, Francis Gentleman, a native dramatic author and actor, of whom we will have something to say further on.

After performing the character of Zanga for three successive nights on his first onset, Mossop chose Richard for his fourth appearance, and most unaccountably dressed the character in white satin pucker. Sheridan justly observed that it had a most comcomby appearance. The remark reached the ears of Mossop, who next morning went to the manager's room, and most emphatically addressed him thus—"Mr. She-ri-dan, I hear you said I dressed Richard like a "Cox-Comb," that is an *af-front*: you wear a sword, pull it out of the *scab-bard*, I'll draw mine, and thrust it into your *bo-dy*." It is said that Sheridan smiled at this furious attack, but after an explanation took place the matter ended amicably. In the winter season that opened on October 7, 1751, a native actor made his appearance, known in Irish theatrical annals as Tottenham Heaphy. He came of a very good family in the south of Ireland, and early in life had entered the service of his "King and Country," in Ligonier's horse, serving several campaigns in Flanders, under the Duke of Cumberland. When peace was concluded in 1746, Heaphy being at liberty, the bent of his inclinations led him to the stage. He had a good figure, and his abilities were of no mean kind. Heaphy performed for some nights at the Capel-street Theatre, but his first appearance at Smock-alley was in the character of Manly in the "Provoked Husband." For many years in the last century Heaphy continued to play on the Dublin stage, and he was a favourite with the old Crow-street audience. Among the engagements of Sheridan for the season of 1751, were Mr. and Mrs. Davies. They appeared first here in Sciolto, in the "Fair Penitent," and "Indiana." Hitchcock thinks Davies and his wife "a couple remarkable for their great utility." Davies is now chiefly known through his "Life of Garrick" and his "Dramatic Miscellanies." As an actor, his

abilities were only very moderate, but subsequent writers who have written of the stage, and of actors and actresses, are much indebted to the criticism and gossip of Davies. From being an actor he turned a bookseller, and continued during his life to figure in brilliant society. Churchill, who let few alone with his Hibernian cudgel or pungent pen, thus sings of Davies:—

"With him came mighty Davies (on my life  
That Davies has a very pretty wife),  
Statesman all over, in plots famous grown,  
He mouths a sentence as eurs mouth a bone."

In "Representative Actors," by Clarke Russell, in a note by the editor it is said that Churchill's sarcasm drove poor Davies from the stage; and we learn from another note in the same volume that the "pretty wife" is believed to have died in 1801 in a work-house.

Among all Sheridan's engagements, none were so popular in the summer of 1751 than that of Miss Woffington. Since she left Dublin she had performed at Covent Garden Theatre, had greatly reformed, and was a favourite with the London audience. When she returned in the above-named year, she was not engaged on her first application to Sheridan, as he had not seen her acting for several years past. At the interposition of friends to whom her improved acting was better known, Sheridan at length consented to give her four hundred pounds for the season. Miss Woffington performed for the first time after her return to her native city on the same night that Heaphy acted Manly. On all sides it was acknowledged that her reception exceeded the most sanguine expectations as delightful to the astonished manager as it was to her audience. The next character that was played by the fascinating "Peg" was Andromache in the "Distressed Mother," in which piece Sheridan played Orestes, Digges Pyrrhus, and Mrs. Bland Hermione. Smock-alley, throughout her performance, was crowded, and applause was frequent and rapturous. "It is almost impossible," writes Hitchcock, "to describe the raptures the audience were in at beholding so beautiful, elegant, and accomplished a woman, or the happy consequences which resulted to Mr. Sheridan." The papers of the day were filled with tributes and eulogies in respect to her person and abilities; the city was in a craze, and we will, as we pass on, afford some illustrations of the spirit of the time.

#### HALIFAX CHURCH "RESTORATION."

It is said (writes the *Athenaeum*) that the fine old parish church at Halifax has been "inspected" by Sir G. Gilbert Scott, with a view to its "restoration." The amount needed for this operation has been estimated by this energetic architect at £40,000. No doubt the Halifax people might, for a good deal less than this sum, get a real new church, which would be no discredit to them or to the architect whom they might employ. To destroy whatever historic and pathetic interest may belong to the existing church in order to produce that which will be neither old nor new, is pure folly. The old features, whether of artistic merit and value or not, are significant of life, use, and history. But this church actually does contain a good deal of excellent perpendicular work, and some portions of older dates, which a "restoration" must of necessity ruin and efface. Every one who has been at Halifax must have felt the impressive, sober, and solemn character of the interior of the parish church. Will any refacing, scraping, or replacing, preserve this inestimable charm? Can any one believe work such as we saw at Exeter, or the still more merciless operations which have turned Chester Cathedral into a soulless piece of mere architecture, of second-rate quality at best, will interest anybody? "Restoration" in general produces an entirely commonplace example of book-Gothic on a large scale at a prodigious cost. Are the people of Halifax about to condemn themselves to a misfortune similar to that which



has befallen their neighbours on the Dee? Will they sacrifice the chief artistic and historic relic of the early days of their town, the place where their forefathers worshipped and were buried, in order to have a brand-new-looking structure, in which not a soul will feel the slightest interest, because all its associations will have been destroyed at a cost of, say, to begin with, £40,000. How hard it is to persuade people that, as a piece of ancient architecture, a "restored" church is worthless! Doubtless Sir G. G. Scott could build a fine large church for the money, but no architect that ever lived could turn that which is old into a new one and retain the original beauty. Halifax is asking for too much if she expects to have the old and the new in the one; Madame Rachel only, after a fashion, it is said, made people "beautiful for ever."

#### IMPERVIOUS MATERIAL FOR DAMP COURSES.\*

THE lecturer introduced his subject by giving statistics of the death-rate of London in the olden time and at the present. He remarked that the comparatively low death-rate of London is the happy result of several causes; that its population is, on the whole, well fed and clothed, and a large proportion belong to the well-to-do classes. The water supplies to that city, though not equal to those of Glasgow and Dublin, are fairly good. The prime cause of the salubrity of London, he states, is its admirable system of drainage.

Sanitary science has of late years made such good progress that its professors are now fairly entitled to speak *ex cathedra*. They tell us that if we do certain things when we are building our houses and making our streets, we are certain to promote the health and increase the longevity of the people who are to inhabit them. If persons knowingly build houses upon unhealthy sites, or if they fail to provide them with those appliances which are necessary to the maintenance of the health of the inmates, they are morally, and ought to be legally, responsible for the consequences which may ensue. It is a matter of notoriety that in this country human dwellings are built upon sites which are in a great part composed of decomposing organic matter ("shot rubbish," as it is termed), and still more frequently in situations where the soil must ever remain damp and unhealthy, owing to irremediable topographical conditions. In Dublin there are too many houses placed under such deplorable conditions, and as there is no so-called "building law" in operation in this city, it seems difficult to prevent house-jobbers from erecting dwellings for the humbler classes in places which cannot be drained, and upon ground artificially produced from rubbish of every kind. We are promised that a bill for a General Building Act for Ireland is to be introduced into Parliament during the present session. If it become law—which, as a government measure, is likely to be the case—I can only say that no piece of legislation was ever more urgently required; for the great majority of the dwellings of the labouring classes in Irish towns are in an almost indescribably bad condition.

The healthy condition of a house depends upon several factors, of which in this paper I purpose to consider but one—namely, that of *site*. I have already stated that some sites are hopelessly or almost hopelessly bad, as for example, those of old water-courses, places lying below the sea level, &c. Some sites, however, though bad, admit of being greatly improved, or, perhaps, of being rendered perfectly healthy. There are two enemies which may enter a house from the ground upon which it is built—namely, *damp* and *foul air*. Each produces or propagates more than one of the ills which flesh is heir to. Rheumatism, phthisis and other

thoracic affections result from damp houses; and cholera, typhoid fever, and dysenteric disease are caused or propagated by foul air—which also, by lowering the vital powers, predisposes those who continually inspire it to contract any disease of an epidemic or endemic type which may happen to be prevalent.

In the construction of most houses, from one-fourth to one-fifth of the brick or stone work is below the ground line. If we assume a house to contain 40,000 cubic feet of space, the foundations will probably enclose about 8,000 or 9,000 cubic feet of earth; even if this earth be tolerably dry, it will certainly contain at least 3,000 gallons of water. Now, bricks are very porous, and allow both gases and water to pass through them. Our houses would not be even so healthy as they are if their brick walls were rendered impervious to the passage of air and moisture, as some say they should be. But while we are glad to allow the air rendered damp by respiration of animals and the combustion of fuel, &c., to escape through our walls, and be replaced by pure, dry air—also transmitted through the porous bricks—we should endeavour to prevent the air coming into the house from below the ground line. The bricks in the foundations being in contact with the damp earth absorb moisture from the latter, and this moisture ascends by capillary attraction from brick to brick until it reaches the superstructure. I have seen damp ascend in this way 30 feet from the ground. Rooms rendered damp by moisture carried up from the foundations are not rarely, but constantly, a cause of disease, of discomfort, and also of injury to articles of clothing and furniture.

Architects and builders have ample experience of ground dampness affecting not only the basement, but some of the above-ground storeys, and several remedies for the evil have been suggested, some of which are occasionally employed. In a few cases I have heard of a layer of sheet lead being interposed between the top of the foundation wall and the base of the superincumbent one. Welsh slates are very frequently used for damp courses; they are embedded in cement. Vitrified earthenware tiles, of from one to one and a-half inches thick, have recently been recommended for this purpose. A mixture of asphalt and sand is occasionally employed; it is poured, whilst hot, upon the top of the foundations about a foot above the ground line. It is also sold in sheets, similar to the asphalt material used for covering roofs.

There are objections to be urged against the materials now used in making damp courses. Lead is too costly, the asphalt does not sufficiently resist the pressure of the upper walls, and the slates and vitrified bricks are not quite impervious to moisture.

A patent has recently been taken out for the manufacture of a peculiar kind of brick, which appears to me admirably adapted for the construction of damp courses. The patentees are Major-General Scott, C.B., F.R.S.—so well known for his high engineering skill and his many ingenious inventions—and Mr. J. C. Bloomfield, of Castle Caldwell, county Fermanagh. The latter gentleman is well known in Ireland as a most zealous advocate for the development of our mineral and manufacturing resources, and is the founder of the celebrated Belleek china factory—the only one in Ireland.

The brick in question is made from a cement consisting almost wholly of a clay limestone, burnt and mixed with five per cent. of plaster of Paris. With this cement is incorporated about one-eighth of its weight of common coal tar. The cement bricks are placed in boiling tar, which passes into their pores, and solidifying therein, renders the bricks absolutely impervious to the passage of moisture or gas.

The brick which I now exhibit was placed in water in my laboratory a week ago, where it remained until to-day. Its weight was taken before it was set to steep, and when it was removed from the water, it was found not to have increased by even a single grain. Some bricks are so porous that they absorb

one-fourth of their own weight of water, and even excellent facing bricks take up from 15 to 18 per cent. of water. Water has wonderful penetrating powers; the beautiful translucent pebbles which we gather from the sea beach contain water; keep them for a few hours in dry air and the translucency vanishes, because the water which had produced the optical appearance had dried out. The thickest walls, the hardest stones, will not keep out water; but there are two kinds of materials which refuse to commingle with water—these are, common fats and tar compounds. The brick which I have here referred to has all the requisite qualities to render it available in the construction of damp courses in all kinds of houses—the cottage of the poor man as well as the mansion of the noble; that is, it is cheap, it resists pressure, it does not decay or change by exposure to air or damp, and it is absolutely impervious to moisture and air.

There is another purpose to which I think the material used in making these bricks might with great advantage be applied, namely, to prevent the air which circulates throughout the soil from passing into the house. Now, very likely the air which issues out of the land may be innocuous; but from the results of the analysis of underground air made by Dr. Von Pettenkofer and others it is certain that it generally contains an abnormal amount of carbonic acid gas, which is—as most educated people know—a very deadly poison. It may, too, occasionally include sewage gases which have escaped into the soil from fissures in sewers and other sources. I take it we ought to regard the air which comes out of the land with grave suspicion: we ought, if we possibly could, prevent it from entering our premises through the floor of the basement storey. Pettenkofer has, with great ingenuity of argument, endeavoured to prove that cholera and typhoid fever are mainly propagated by means of the underground air. That there are motions or currents in the subterranean air as well as in the general volume of the atmosphere, has been conclusively proved. In loose, porous soils both air and water circulate more freely than in tenacious, stiff clays. The soil, we know, is the receptacle of much of the effete matters produced in houses. Now, if in the soil of a particular place there be deposited the matters ejected from the body of a typhoid or cholera patient, the gases and vapours evolved therefrom may be transported to a considerable distance from the spot by the media of subterranean currents of water and of air. According to Pettenkofer, foul air of this dangerous and disease-laden nature frequently enters houses through the basement floor, and causes disease. The more porous the soil is, the more likely is it that the gases may escape from it into the atmosphere of the houses. A strong wind playing upon the surface of the ground outside the house may force a portion of the air out of the soil into the interior of the adjacent houses.

The tiles which Messrs. Scott and Bloomfield propose to manufacture appear to me to be well adapted for covering completely the surface of the ground enclosed with the walls of a house. The surface of the ground being made perfectly smooth, it should be covered with a layer of puddle well rammed down, or, still better, with a coating of the cheapest concrete. Upon this surface the tiles should be laid, and cemented with a mixture of selenitic cement and tar. The tiles should be carried up to meet the damp course upon the top of the foundations. The drains, if they had to be carried under the house, should be placed below the flooring of tiles, and it would be desirable to lay them in a trench composed of the tile material. A house built over such a surface as that which I have described would be absolutely impervious to foul air from the soil; and should the sewer pipes be broken by the agency of frost or otherwise, no offensive emanations from them could by possibility enter the house. They would probably be carried off by underground currents to enter some neighbouring houses with basement porous floors.

\* By C. A. Cameron, M.D., City Analyst. Read before Royal Dublin Society on the 19th ult.





DESIGNED BY MR. J. J. COUGHLIN, ARCHT. • PHOTOGRAPHED BY MR. J. J. COUGHLIN, ARCHT. • PHOTOGRAPHED BY MR. J. J. COUGHLIN, ARCHT.



THE LIBRARY  
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The cost of a square yard of impervious tiles would, as I am informed, be 4s. 2d. in Dublin, the tiles being 1½ inch in thickness. At this rate a house of, say, 40 feet by 30 feet could be provided with a layer of the tiles beneath the basement floor at a cost not exceeding £20—a sum which appears by no means excessive, when the advantages of having such a foundation are considered.

To many persons it may seem improbable that air in any quantity could come out of the ground into our houses; but I have satisfied myself that such really is the case. When the doors and windows of the kitchen are closed, and fuel in large quantity is burning, the air may nearly always be felt rustling up through the fissures in the flags or tiles constituting the floor. The combustion of fuel in our dwellings undoubtedly causes a large insuccion of air from without, and it is better that air should come from the pure atmosphere, and not from the soil, in which coal gas, sewage gases, and other objectionable matters may, perhaps, be abundantly present.

That I have not exaggerated the importance of keeping our dwellings dry, I need but refer to the extraordinary results which have followed from the main drainage works undertaken in many of the large towns in England. These surely justify me in recommending that no reasonable expense should be spared to secure for our houses and our towns immunity from two of man's most deadly enemies—damp and foul air.

### THE FREE LIBRARY QUESTION, AND OTHER QUESTIONS.

THE advisability of establishing a Free Library in this city has been the subject of a notice by a member of the Corporation. This is not, as some are led to suppose, the first time the question has been brought under the attention of our citizens. In every volume of the IRISH BUILDER for the past seven years we have been continuously urging the formation of a Free Library, as we knew that the Corporation, like other town councils throughout the kingdom, had the power of doing so under the Act passed in 1855. All that is needed is to convene a public meeting, and if two-thirds of the householders vote for the measure, the Corporation can at once proceed to carry the Act into force, and strike a rate for the maintenance of the institution. Now, we are of opinion that it will not need a rate as high as a penny in the pound in Dublin to support such an institution, but that half that sum, if economically managed, will be quite sufficient. We do not want at first any expensive buildings, or elaborate staff, or enormous outlay for providing books. It is more than probable that donations of some hundreds of volumes would be forthcoming if solicited. *En passant* we may remark that for several months back there have been a number of fitful spurts made in the Corporation, leading the citizens to suppose that great activity in the public interest was being evidenced, great reforms projected, and great improvements about being carried out. Little or no practical work, after all, is being done, and we must plainly tell the citizens that the Corporation has only been entertaining them with a flourish of trumpets again and again repeated. A few months ago we were told that the Artisans Dwellings Act was about to be carried out, and the Corporation were taking credit in advance for their good intentions. The wise ones in that assembly were, however, more interested with the promotion of a so-called Dublin Improvement Bill; and if this measure succeeded, the Artisans Dwellings Act would get the go-by in several directions. The "City Fathers" preferred, for certain wise reasons of their own, to saddle the costs of a private bill upon our citizens, and property that could be taken under the Artisans Dwellings Act is proposed to be taken under the Land Clauses Act. Enormous sums would have to be paid for compensation under the latter act, and "parents, friends, and relatives," would, no doubt,

benefit. If there be any real intention to carry out the Free Library Act in this city, it will have our hearty support, but we will be no party to one no more than to a series of manœuvres in our Town Council, calculated to mislead the people, and make them believe that the Corporation is really interesting itself in the improvement of the city. The Corporation of Dublin have often hitherto rushed into schemes without any well-digested plan, and if the voice of the ratepayers should empower them to proceed in the matter of a Free Library, it is impossible to anticipate in what manner the work may be accomplished. The object is a good one. The utility of a Free Library is unquestionable, but we are not at all sanguine, judging by the past, that the hands which are to be entrusted with the task, will acquit themselves to the satisfaction of the public.

### THE ROYAL IRISH ACADEMY.

A GENERAL meeting of the Academy was held on Monday, evening, in the Academy House, Dawson-street,

SAMUEL FERGUSON, Esq., LL.D., V.P.,  
in the chair.

Dr. E. P. Wright (secretary) read, for Dr. Angus Smith, a paper on the "The Revival of Manuscripts on Parchment." Having briefly noticed the usual methods employed, Dr. Smith states that he found the preservation of the writing much facilitated by moistening the parchment with water until it was quite soft, and then mounting in on cardboard. To revive the writing, ferrocyanide of potassium, acidulated with acetic acid, gave the best results. Other solutions gave results that, to say the least, could not be regarded as final; but the one mentioned, made, to the doctor's surprise, the whole parchment perfectly white. The dark and brown, dirty and crumpled parchment, with illegible marks, was like a sheet of white paper, with writing perfectly clear and sharp when laid on a board, still in a moist state. After a time, however, the writing began to fade. Another acid—common sulphuric—was then tried on parchments with which other processes had failed, and the result confirmed Dr. Smith in the belief that by allowing the writing to remain longer it would take up more of the solution, and darken by being penetrated. By modifications he believed the process could be perfected. Specimens of parchment, showing the results obtained by the process, were exhibited.

Mr. W. D. La Touche, D.L., in moving that the paper be referred to council for publication, mentioned that one of the parchments on which Dr. Smith experimented turned out to be a portion of a bill in equity filed in 1830 by Alderman Kennedy, of Dublin, to recover possession of the lands of Rockstown and Scalpwilliam, county of Dublin. Another set out several generations of the Burke, and a third related to the Talbot family. All these parchments were illegible until Dr. Smith revived the writing.

Sir Robert Kane seconded the motion, and remarked that the pen marks remained on the parchment after the ink writing had disappeared.

Dr. Frazer observed that chloroform would be found a most efficient agent in cleaning paper and parchment, and in reviving illegible writing.

Professor O'Looney doubted whether the use of any chemical process would permanently restore the faded writing on vellum. He mentioned an instance where the process caused the loss for ever of three-fourths of a very valuable MS. in that Academy.

Professor Barrett mentioned a curious fact, perhaps not well known, that electrotyping effectually restores faded daguerreotypes.

After some observations from Mr. B. M. Draper, Mr. Porte, and Mr. Garstin, the motion was adopted.

The Secretary read a paper, by the Astronomer Royal, explaining the scientific method

by which a clock, constructed by Messrs. Booth, was made to show in Dublin the mean time to the fraction of a second, from the Observatory, Dunsink.

A discussion followed, and the paper was referred to Council for publication.

It was announced that donations to the library had been received from Dr. Wright; and Mr. Garstin stated that the Board of Works had sent for the museum several antique articles, found during the work of preserving the national monuments, vested in them by the Irish Church Act.

The Academy then proceeded to transact private business.

It is understood that an important communication has been received from the Government with respect to the Academy and the proposed National Museum of Science and Art; and that, on the motion of Sir Robert Kane, the Academy will consider the communication on Monday next. It is also understood that the communication in question is favourable to the views entertained by the great majority of the members of the Academy.

### PROFESSOR BARRY'S LECTURES ON ARCHITECTURE.

ON Monday night, Professor Barry, R.A., delivered the first of his series of Lectures for 1877. The chair was occupied by Mr. Pickersgill, R.A., and among the company were a large number of professors and students, members of the Academy and the Institute of Architects. We must postpone until our next issue a report *in extenso* of the lecture, and content ourselves here in saying, that the lecturer began by announcing his purpose in the present series, to confine his remarks within the limits of Domestic Architecture—that great problem of the day. The laws governing ecclesiastical buildings are determined, he said; but that is far from the case with the principles on which our habitations should be designed. In his survey of the present æsthetic uncertainties of house building, the lecturer was humorously sarcastic in passages, and in proceeding he welcomed the criticism even of half-informed commentators as a relief from apathy. Anything sooner, said he, than the resigned ignorance which proclaims a sort of merit that it knows nothing about the matter. In speaking of originality, he encouraged the generous enthusiasm of youth, which strives to emancipate its powers from all the bonds of conventionality; but he showed how the most original thoughts must and ought to be subject to restraining circumstances. Still, an enthusiasm that needs to be checked is better than sluggish indifference. The rise of that peculiarly English domestic architecture which followed the Reformation, and was characteristic of the vast establishments of great men, was admirably described. Columns and eutablatures borrowed from Greece and Rome were blended with mulions, gables, and other features of Gothic architecture, as in such examples as Haddon Hall and Hatfield House. Such originality, he said, did not break with the past; it was founded on development, not on destruction, and was thoroughly in accordance with our national spirit, which is reforming, not revolutionary. In the conclusion of his lecture, Mr. Barry aptly quoted the German Emperor's lesson to his grandson on the young man's entrance to the military profession: "In the appreciation of what may be thought a trifling matter will be found the capacity for great things."

### EXHIBITION OF ART-NEEDLEWORK.

We would request particular attention to an announcement in our advertising columns that an exhibition of Ancient and Modern Art-Needlework will be opened on the 5th inst. at the Exhibition Palace. The proceeds will be devoted to the Royal Irish School of Art-Needlework, Queen's Institute, Molesworth-street. We hope it will receive the amount of patronage it so well deserves.



## ZINC WHITE AS PAINT.\*

SOME years ago, when I first had the honour of delivering a course of lectures before this society, my subject was artists' colours and pigments. In these lectures I pointed out very earnestly the great objection I had to white lead as a pigment for artists. The following reasons which I then assigned for its disuse I have still further confirmed by long experience. First, white lead is discoloured by sulphuretted hydrogen, which is known as foul air. In small quantities sulphuretted hydrogen changes the tint of white lead to that of a dirty brown colour, and in larger quantities it blackens it completely. It is manifest that such a pigment ought never to be employed, where the permanency of a delicate tint is desired, and where foul air can have access to the painting in which it is employed. Another reason I then explained was, that oil with which lead is ground up is decomposed, first, by the action of the oxide of lead in the white lead, forming a lead soap known as lead plaster; and, further, after the lapse of a long time, an interchange takes place between the acids of the oil and the acid of the carbonated lead; take for example the oleic acid and the carbonate of lead forming oleate of lead, which is, in fact, lead soap. I shall presently show you a specimen of lead soap, and you will be able to distinguish the difference of opacity between it and lead paint; therefore, if lead paint, that is, carbonate of lead, loses its opacity, it loses that quality for which it is so much valued. It is true that a saponification of the oil by the oxide of lead and the carbonate of lead gives to the paint at first a quality for which it is much valued; and this quality consists in the facility with which the workman can lay it on, and make it cover the ground which it is intended to conceal. But this very change, which in the first instance is an advantage, brings about future calamity, for the saponification increasing, the transparency of the pigment also increases, and so at last that which it was intended to conceal, again reveals its existence through it. I do not intend this evening to enter upon the subject of white lead manufacture. I have, on one or two occasions, very fully explained it in this room, and other gentlemen in treating on subjects in which it occurs have also treated its manufacture in an exhaustive manner. It is enough for me to remark that wherever white lead comes in contact with the digestive organs of a human being, whether it be by passing in a state of fine division into the mouth, and thence out, as it must do, without excessive precautions, into the system—in places where white lead is manufactured and ground—or through the carelessness and want of cleanliness of painters, who eat their meals with hands sullied by noxious materials, so that it passes into their system, it produces the same disease, which is known by the name of "lead-poisoning." Experience tells us that many, even most men, will, for temporary ease, run the risk of future pain and calamity. It is all very well to say that precautions are taken to save men from the consequence of their carelessness and indulgence. Similar precautions are taken in coal-mines, which if attended to would prevent the awful calamities which so frequently result from their neglect. We must not content ourselves with these precautions when we can, if we chose, do away with the danger altogether. It is clear we cannot give up the use of coal, but now we can give up the use of white lead in those employments where it is injurious to the health of the employed; and nothing but a miserable prejudice, and what is worse, a miserable clinging to commercial interests, can stand in the way of this reform, which, I believe I can show you to-night, will not require any sacrifice on the part of those who use this material for decoration, cleaning, and beautifying of the houses in which they dwell. I have to introduce to your notice a zinc pig-

ment, which possesses nearly, if not quite, as good a body as the best white lead, and which will neither turn brown nor blacken by the action of foul air, nor will it become semi-transparent, as I have already shown you white lead does.

The processes of its manufacture have been patented, and it is now being made on a large scale for the inventor, Mr. T. Griffiths, of the Silicate Paint Company, Liverpool. It has for its basis the white sulphide of zinc, a precipitate well known to chemists in their analysis, but one which usually presents a most dingy and uninviting appearance in the test-tube. It was found, however, that this precipitate, properly treated, possessed what painters term "body," and the problem to be solved was, how to prepare it pure in tint. Like most important inventions, the first laboratory experiments were disappointing and unsatisfactory. It was attempted to precipitate pure sulphate of zinc by pure sulphide of sodium. But it was found that, even after several crystallizations, the zinc sulphate still retained sufficient impurities to injure the brilliancy of the white, and the sulphide of sodium was liable to the same objections. For a time this was abandoned. Sulphuretted hydrogen was tried, the zinc solution being made alkaline as it became acid. It is well known to chemists that zinc frequently contains traces of cadmium, which it is very difficult to remove. The cadmium at once showed itself in this method, being precipitated as a yellow sulphide. Of course, the cadmium might have been easily removed, by saturating the acid zinc solution with the gas, and filtering from the precipitate thus formed; but the process had the great objection of being too expensive for large manufacture. Sulphide of calcium was found to answer well as a precipitant; but for some unexplained cause, the product lacked "body." It was determined to try sulphide of sodium on a large scale, no attempt being made to purify the zinc solution, and the sulphide of sodium only being allowed to deposit such solid matters as did not remain in solution. Strange to say, the zinc sulphide precipitated was perfectly white, and the original impurities remained in solution. The washed and dried precipitate, although having better body than ordinary zinc white, still fell far short of white lead in this quality, and calcination was resorted to remedy this. The result was satisfactory as regarded body, but the pigment acquired a yellow tint, which could not be removed; besides this, it acquired a degree of hardness which necessitated much grinding to make it fit for use as paint. If the particles of zinc sulphide could be kept asunder in the process of calcination, this might be remedied. Sulphate of barium promised well for this purpose, and it was accordingly tried. Zinc sulphate was first precipitated by sulphide of sodium, and to the mixture was added a certain proportion of chloride of barium. The resulting precipitate of sulphate of barium was intimately mixed with the first precipitate of sulphide of zinc, and the washed precipitates were subjected to a red heat for several hours in a reverberatory furnace. On examining the product it was found to be excellent as regards body, far better than sulphide of zinc alone,—in fact quite equal to white lead, and the tint was pure. These results were most satisfactory, and it was clearly shown that sulphate of barium was far from being detrimental, and therefore could not be looked upon as an adulterant. One quality was still wanting—"softness." The product, when ground with oil, did not work kindly under the brush, but had a tendency to drag and become streaky. Many remedies were suggested to obviate this, but for various reasons had to be rejected. It was found, however, after much experimentation and research, that magnesia in small quantity imparted this quality of softness to the pigment and caused it to unite kindly with oil. This admixture was effected in the precipitating vats along with the sulphide of zinc, and no doubt saponification is brought about between the magnesia and the oil similar to

that produced by white lead and oil, but not to same extent, and thus ease in working is imparted to the paint. This pigment is now being manufactured on the principles I have described, such small modifications only being introduced as the growing knowledge of the peculiarities of the process suggest.

## THE ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND.

On the 16th ult. a deputation of the Institute waited upon his Grace the Duke of Marlborough at the Castle, to present him with an address of welcome. The deputation consisted of James H. Owen, M.A., Vice-President; F. V. Clarendon, Thomas Drew, Charles Geoghegan, J. R. Carroll, William Stirling, J. J. O'Callaghan, A. E. Murray, F. Franklin, W. M. Mitchell, William Turner, G. C. Henderson, Hon. Sec.; and Dr. Chas. A. Cameron, Hon. Fellow.

Mr. Owen, in the absence from illness of the President of the Institute, read the following address to his Grace:—

MAY IT PLEASE YOUR GRACE,—We, the President and Council of the Royal Institute of the Architects of Ireland, desire very humbly to present our earnest and sincere congratulations on your Grace's assumption of the high and dignified office of the representative in this country of her most gracious Majesty the Queen. The profession which we follow is generally very little affected or interested in the legislative measures of the day; but there are questions at the present time, the vital importance of which is now beginning to be fully recognised, and by none, we believe, more than by your Grace. Chief among these is the feeling of the necessity of providing a pure atmosphere, both moral and natural, in all dwellings. We are glad to know that it is the intention of the Government to introduce measures for improving the sanitary arrangements of dwellings in our towns and cities; and, we would suggest to your Grace, with great respect, that the intended legislation would be made more complete and effectual, many impediments to improvement would be removed, if the proposed measure were extended so as to include the powers and regulations necessary to provide for the decent and orderly alignment of houses and streets in towns, precautions necessary to check the spreading of fires, and powers for removing and rebuilding old structures which are frail and dangerous; and for enforcing safe and sound construction in new ones. It is, perhaps, unusual to introduce into an address of congratulation such serious and weighty topics; but your Grace has so often and so heartily expressed the desire to assist, in any way, in the prosecution of every good work in the country, that we feel assured that the suggestion which we venture to submit will not be unwelcome, whatever may be the opinion of your Grace as to its practicability. At present there are no facilities for the study of Architecture, and, therefore, it is a matter of great satisfaction to the members of our Institute to learn that there is an intention on the part of the Government to extend to Dublin the advantages of an Art Museum. The Royal Institute has for its patron her Majesty the Queen, and has, hitherto, had the privilege of having the Lord Lieutenant of Ireland for the time being, as its vice-patron. We have, therefore, ventured to request that your Grace will be pleased to honour the Institute by accepting that office.—Signed on behalf of the Royal Institute,

J. M'CURDY, President.

G. C. HENDERSON, Hon. Secretary.

His Grace in reply said—

MR. PRESIDENT AND COUNCIL OF THE ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND—I receive with pleasure your friendly congratulations on my appointment to the office of her Majesty's representative in this country. I view as essential to the well-being of a community the branch of a professional acquirement in the cultivation of which you specially devote yourselves, and it is one in the advance of which the responsible Government must ever take a warm interest. With you, gentlemen, it greatly rests to carry into effect those conceptions which embellish cities with public buildings and add to their dignity and importance, and attest the wealth and the public spirit of their inhabitants. The desire which must occupy every great work of this nature to ameliorate the moral and social condition of the artisans may find also its expression no less beneficially at your hands by the introduction of improved constructions, of increased comfort and cleanliness and sanitary arrangements into their dwellings. Of no less im-

\* By Professor Barff, M.A. Read at meeting of Society of Arts, February 14th, 1877.



portance is the elucidation of those modes of building by which the safety of life and property against fire requires additional guarantee. From the enlightened observations which you have made upon these points I feel that the interests to which you are so alive may, with confidence, be left to your keeping. I gladly consent to become your vice-patron, and you may reckon on my support in fostering to the best of my power the study and progress of art architecture in Ireland.

### ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At the meeting of this Institute, held on the 19th ult., Mr. Charles Barry, president, in the chair, some new members and associates were balloted for and elected. Mr. Eastlake, the secretary, read a letter from General Knollys on behalf of the Prince of Wales, expressing a hope that the president of the Institute for the time being would allow his name to be added to the list of British Commissioners for the Paris Exhibition of 1878. The president had complied with this request, and attended the first meeting held on the 17th ult. The Prince of Wales had arranged for the division of the commissioners into various committees, and had thought fit to include in the *personnel* of the committee on Fine Arts the name of the president of the Institute. The drawings and sketches submitted by the candidates for the Pugin Travelling Studentship for 1877 were exhibited, and it was announced by Mr. Eastlake that the council had awarded the studentship to Mr. W. Talbot Brown, and a medal of merit to Mr. George Brown, whilst the drawings of Mr. Sydney Vacher and Mr. W. H. Wood received honourable mention. Nine candidates submitted drawings, and the council had great pleasure in reporting that the standard of excellence had been fully maintained by the competitors. Mr. A. Waterhouse then read a paper descriptive of the new Town Hall at Manchester, of which he is the architect. A discussion followed, taken part in by Mr. Powell, M.P., Mr. Street, R.A., Mr. Mocatta, Professor Donaldson, Mr. T. H. Wyatt, Mr. C. Fowler, and Mr. Edmeston, and after a vote of thanks Mr. Waterhouse made an appropriate reply.

The next meeting will be held on March 5th, to consider the recommendation of the council as to the award of the gold medal, and to receive the report of the committee on the improvement of the Institute.

We may add, we are glad to see that simple justice has been done by adding the president's name to the list of commissioners for the Paris Exhibition.

### ADVERSARIA HIBERNICA.

#### LITERARY AND TECHNICAL.

THE uses to which cast iron could be applied for building purposes attracted attention even in the last century. In the first volume of the "Transactions" of the Royal Society of Edinburgh, there is a paper of Dr. Anderson "On the Economical Uses to which Cast Iron may be applied." As a historical matter in the literature of building speculation and construction, this paper is worthy of notice. Dr. Anderson observed, that in several mechanical arts, masses of great weight, size, and strength, are required for bruising or grinding various substances, and that it is often difficult to procure stones of sufficient size and strength for these purposes. Cast iron, he says, though proper in point of strength, and easily made of almost any size or shape, is sometimes inconvenient from its weight, and is for many purposes too expensive. He proposes, therefore, that instead of pure iron, the moulds in which such masses are to be cast should be nearly filled with stones, or, what would be still better, with bricks, as these could be moulded to the exact shape required, a proper place being left for the axle where needed, and an interstice between the outermost of them and the mould; that then melted iron should be poured in to fill

up every chink. This iron, continues the essayist, cooling and consolidating, will unite or cement the stones or bricks firmly together, and cover them with a uniform surface of metal. Thus, masses of any size, shape, and weight, and of sufficient strength, may be procured at a cheap rate, as a very small quantity of metal would be sufficient for a cement, and a coating to the stones or bricks. In the same way Dr. Anderson thinks many architectural ornaments might be made very cheap (very cheap indeed), and very durable, and he suggests the application of the method to the important purpose of bridge building, where very large stones are often required for the construction of the arches. Instead of such large stones, he proposes the use of compound masses, such as already mentioned, cemented with iron, and exactly moulded, so as to form, if required, an entire rib of an arch without a fissure; and he thinks that in this way a number of arches might be accurately and firmly put together. Had Dr. Anderson lived till our day, he would be surprised at the uses to which cast iron is applied. His suggestions have in part, under modifications, been carried out; and he is entitled to credit for his foresight and shrewdness, though he lacked a practical knowledge of the manufacture and treatment of iron, and an experience of its behaviour in building construction.

The late Charles Babbage, of "Calculating Machine" fame, was certainly at hinker of profound penetration, and not only was he a thinker, but a ceaseless workman, until near the close of his useful life. In his excellent volume, published in 1832, on the "Economy of Machinery on Manufactures," there is a vast deal of condensed information, and his reflections throughout the various chapters of his work have proved to a great extent prophetic utterances. In the last chapter of his work, in treating of the future prospects of manufactures as connected with science, he writes:—"It is highly probable that in the next generation, the race of scientific men will spring from a class of persons altogether different from that which has hitherto scantily supplied them. Requiring, for the success of their pursuits, previous education, leisure and fortune, few are so likely to unite these essentials as the sons of our wealthy manufacturers, who, having been enriched by their own exertions, in a field connected with science, will be ambitious of having their children distinguished in its ranks. It must, however, be admitted that this desire in the parents would acquire great additional intensity, if worldly honours occasionally followed successful efforts; and that the country would thus gain for science talents which are frequently rendered useless by the unsuitable situations in which they are placed."

Kindred to this question, let us hope also that a healthy reaction may soon set in, leading parents to look upon handicraft as a dignified, instead of a vulgar, calling. The acquisition of a trade is the acquisition of a knowledge and power that will be always useful, and there is no reason why the skilled and successful craftsman may not rise to distinction as well as any member of the so-called learned professions. Humble as well as middle-class parents are prone to make clerks of their sons. It is thought to be a genteel calling, free of dirt, with no risk of soiling one's person or dress, and the young man of course can pass off as a gentleman on £80 or £100 or more a year, and look down with contempt on the building or other artisan in corduroy or bar-ragan. Foolish parents, foolish young men! clerkship, as a profession, is over-run; the great majority of our clerks are in a pitiable state. While juniors, it may be well enough with them with their parents' homes to go to; but, owing to the supply exceeding the demand, unfortunately many, very many, clerks continue as juniors, as far as salaries are concerned, the greater part of their lives. Industrial and mechanical employments are far preferable in this age to clerkships or shop assistants. Of course some may become principals, but the majority must continue,

more or less, ill-paid public and private slaves.

In the same volume alluded to in the preceding note, Babbage, in making his forecast, writes:—"But perhaps a doubt may arise in the mind whilst contemplating the continually increasing field of human knowledge, that the weak arm of man may want physical force requisite to render that knowledge available. The experience of the past stamped with indelible character of truth the maxim, 'Knowledge is power.' It not merely gives to its votaries control over the mental faculties of their species, but is itself the generator of physical force. The discovery of the expansive power of steam, its condensation, and the doctrine of latent heat, has already added to the population of this small island millions of hands. But the source of this power is not without limit, and the coal mines of the world may ultimately be exhausted. Without adverting to the theory, that new formations are now depositing under the sea, at the estuaries of some of our large rivers; without anticipating the application of other fluids requiring a less supply of caloric than water—we may remark that the sea itself offers a perennial source of power hitherto almost unapplied. The tides, twice in each day, raise a vast mass of water, which might be made available for driving machinery. But supposing heat still to remain necessary when the exhaustion of our coal fields render it expensive; long before that period arrives other methods will probably have been invented for producing it."

Babbage further points out the known existence of springs of hot water, which have flowed for centuries unutilised; and, in the case of Iceland, to sources of heat in proximity to large masses of ice. He thinks that the ice of the glaciers of that island may yet enable its inhabitants to liquefy the gases with the least expenditure of mechanical force, and the heat of its volcanoes yield the necessary power for their condensation.

The concluding passages of the last chapter of Babbage's work are very eloquent. He was a believer in the plurality of worlds, and there are reasons for believing that he and others who held the same doctrine are in the right. He writes in his concluding paragraph:—"For since every portion of our own material globe, and every animated being it supports, affords, on more scrutinising inquiry, more perfect evidence of design, it would indeed be most unphilosophical to believe that those sister spheres, glowing with light and heat from the same central source—and the members of those kindred systems, almost lost in the remoteness of space, and perceptible only from the countless multitude of their congregated globes,—should each be no more than a floating chaos of unformed matter;—or being all the work of the same Almighty Architect, that no living eye should be gladdened by their forms of beauty, that no intellectual being should expend its faculties in deciphering their laws."

It may not be amiss to state in conclusion that Babbage was born as far back as 1792, and when he recently passed from amongst us he was a ripe octogenarian philosopher. Besides the work mentioned, he was the author of "Passages from the Life of a Philosopher," "Autobiographical Reminiscences," and other works.

We know not whether any alterations of material consequence have taken place during late years in the Chapel of the Rotundo Hospital in this city. In our younger days the ornamentation of this chapel was much admired, and was often inspected by strangers who visited Dublin. The stucco work of the ceiling of this chapel is peculiar, and, with the figures, evidences skilful and excellent workmanship, well worthy of the study of architects, builders, and building workmen. The figures are in alto-relievo, and are life-size. The designs of this beautiful stucco ornamentation in the Rotundo Chapel, was by Cre-millon, a French artist, but he had for his



assistants two Italian artists of the name of Francini. It has been a matter of regret on the part of many that the artists of the Rotundo Chapel were not engaged to execute other work for public institutions during their stay in Ireland. There is one house, however, in Rutland-square, formerly the residence of Alderman James, of the old Corporation, the stucco work of which was executed by Francini, the house was originally built for Dr. Bartholomew Mosse, founder of the Lying-in Hospital, for his private residence. Doubtless, this house, as well as the Rotundo Hospital and Chapel, was designed by Richard Castles. Independent of the work of foreign artists, there was good stucco work and plastering executed in Dublin, and noblemen's mansions throughout the provinces during the latter portion of the eighteenth century. Castles the architect, and Dr. Mosse, the founder of the Rotundo hospital, were boon companions, and often spent hours over their cups. The architect was very whimsical in many ways, and it is related of him that he had an aversion to shaving, and was cautious of those he employed. He fixed upon a Mr. Simpson, a stucco worker, who performed that operation for some years, and Castles was so well pleased with his performances, that he recommended him to much business as a plasterer. Another habit of Castles was, when the effect of his works was not such as he liked, he often pulled them down; and whenever he came to inspect them, he required the attendance of all the artificers in the building, who followed him in a long train. On such occasions he most likely pointed out defects, if any existed, and gave counsel as well as directions to those who stood in need of them. Workmen in these days are not seen in a train at the heels of a visiting architect. The clerk of works, the builder's foreman, or the builder himself takes instructions, if the architect has any to give, and there is far less sympathy than there ought to be between architects and workmen. H.

### THE TESTING OF PORTLAND CEMENT.

A PAPER on this subject, by Mr. I. J. Mann, assistant engineer, Port and Docks Office, Dublin, will be found in the first part of the session 1876-77 of the "Minutes of Proceedings of the Institution of Civil Engineers," just issued. The properties usually examined were tensile strength, pulverisation, weight, and colour. In its ungauged condition, good Portland cement is of a uniform dull grey colour, but this test alone was insufficient. The method of weighing generally adopted as giving the most uniform was as follows:—Dry cement, as received from the manufacturer, was allowed to flow from a small hopper headed shoot into a counterpoised measure of known capacity, usually referred to the imperial bushel. Weighed after this manner, Portland cement varied from 78 lb. to 102 lb. per cubic foot, and here a very uncertain ratio to its strength, as was evident from numerous experiments made by the author, as well as by Mr. Grant and Mr. Colson ("Minutes of Proceedings, Institution of Civil Engineers," vols. xxv. and xli.). It was, therefore, suggested that the present unscientific and comparatively useless operation of weighing should be discarded, and the specific gravity be taken instead. To enable this to be done, the author had devised an extremely simple gravimeter. It consisted of a small glass vessel, holding, when filled to a mark on the neck, a given quantity of liquid, and of a glass pipette furnished with a graduated stem and stop-cock, and containing, when filled to a mark on its upper extremity, a volume of liquid equal to that held by the first-mentioned vessel, minus the quantity displaced by 1,000 grains of the densest substance intended to be examined. In using the gravimeter, the pipette was filled to the mark with paraffine; 1,000 grains of the cement were then introduced into the smaller vessel, which was placed under the pipette and filled to the mark. The height of the

column of liquid remaining in the pipette determined the specific gravity, which could be at once read off on the graduated stem. As the result of about fifty experiments, it was ascertained that the specific gravity varied from 2.77 to 3.03, the average being 2.91, shewing that Portland cement was heavier than ordinary building stone.

The degree of pulverisation at present demanded varied greatly. Experiments showed that coarsely-ground cement, when gauged neat, generally possessed greater tensile strength than finely-ground cement, the age of the samples being seven days; after one month's immersion the breaking weight of 2½ square inches was, for fine screened sand, 939 lb., and for coarse unscreened, 989 lb. When the age of the samples was six months the results were similar. In the case of cement containing not more than 10 per cent. of coarse particles, it was found that they might be replaced by sand without affecting the strength of the aggregate; beyond 10 per cent. the results were increasingly in favour of the coarse particles as compared with sand. In order to ascertain the effect of coarsely-ground cement on mortar, experiments were made with cement of various degrees of coarseness, and sand gauged in equal volumes. From these experiments, it appeared that, when diluted with an equal volume of sand, coarse cement did not give such favourable results as fine. In many instances, the cement containing 25 per cent. of coarse particles possessed little more than one-half the tensile strength of mortar gauged in the same proportions with fine sifted cement, the age of the samples being four weeks. On the whole, the author believed that cement, of which not more than 10 per cent. was stopped by a sieve with perforations 1.50th of an inch in diameter, probably approached the present economical limit of grinding. In connexion with what might be called mechanical agency, experiments had been made on the effect produced by sands of different degrees of granulation, on the strength of cement mortar. These tests showed that extremely fine sand diminished the tensile strength to less than one-half of that of mortar made with coarse sand.

The test of tensile strength was of all others the most important, and, if properly applied, not only to the cement in its neat condition, but also when diluted with sand, would answer all practical purposes. The method of making the sample briquettes to a great extent determined the breaking weight. The author recommended that the cement should be packed closely into the mould, heaped a little higher than the edges, and pressure applied, by which pressure superfluous water was forced out, and the strength of the sample was increased 25 per cent., the best test-blocks being made with from 6 oz. to 7 oz. of water to 32 oz. of cement. The shape of the sample briquette was also capable of improvement, as the irregular strains produced by the clips holding the sample, which clips had a tendency to collapse, led to crushing strains. To avoid the use of clips, the author had had holes drilled in the samples and the narrow part reduced in area, with a view to prevent fracture through the eye; they were then broken by steel pins passing through the eyes. A comparison between samples of the ordinary shape broken with clips, and of others having circular ends, broken with steel pins passing through eyes, shewed an increase of nearly 20 per cent. in favour of the proposed shape. In regard to the age at which the sample briquette should be broken, it was remarked that generally cement sets with sufficient quickness to enable its quality to be determined by the seven-day test; but the difference in the strength of seven-day and twenty-eight day samples was found, from numerous experiments, to be about 20 per cent. The standard of tensile strength, specified at the commencement of the London Main Drainage Works, was a breaking-weight of 400 lb. on an area of 2.25 square inches (equal to about 178 lb. per inch), after seven days' immersion. At present, a tensile strength of 350 lb. per square

inch was frequently demanded and obtained. In the author's experiments, a strength of from 400 lb. to 500 lb. per square inch, after seven days' immersion, was not uncommon, and in some instances it rose to 600 lb. per square inch. The average of a large number of tests within the last three years had been 380 lb. after seven days, and 450 lb. per square inch for twenty-eight day samples.

### REVELATIONS FOR RATEPAYERS—HOW THE MONEY GOES.

WE annex an article of the London *Daily Telegraph*, to which we supply a heading. We have no doubt it will be read with some interest in this city and throughout the provinces, for it is very suggestive, and has its application to corporations and local boards in our midst. In fact, the article in itself supplies sufficient for the common understanding without any further comment on our part:—

A profane and misanthropic wit, whose temper had been sorely tried by his experience of the tortuous and impenetrable diplomacy which sometimes distinguishes public boards, is reported to have arrived at the conclusion that a corporation possessed neither a body nor a soul. But, as we cannot learn that this phantomic theory has been developed into a distinct psychological system, we presume that the author of the remarkable definition we have mentioned only intended it to represent hyperbolically the intangible character of the proceedings of all boards whatsoever in their official capacity. A shareholder in a public company, for example, who makes unsuccessful attempts to ventilate a grievance against the management, would be very likely to become a willing adherent of this strange philosophy of corporate existence. The secretary to whom he applies for redress refers his complaints to the directors; but upon no individual in particular is he able to fasten responsibility, and, after fruitless exertions to put his finger on the real centre of authority which is supposed to reside somewhere within the precincts of the board, he abandons in despair his endeavours to clutch a will-o'-the-wisp that eludes his grasp at every turn. This spectral peculiarity of official life may contribute to public advantage; but it must be confessed that it also tends occasionally to public inconvenience. Those who provide funds and those who are appointed to control the appropriation of them often sustain to each other the same sort of relation which subsisted between the priests of the Osirian mysteries and their superstitious votaries. The former constituted a sacred order who manipulated the sacrifices, worked the oracle, and put an esoteric meaning on the ambiguous deliverances communicated to the outside world. The business of the latter, on the other hand, was to be satisfied with that gross exoteric interpretation of the Pagan ritual which befitted their less privileged position in the service of the national divinities. In like manner, no constituency is necessarily much the wiser as to the way in which the moneys it has paid to any given fund have been employed from reading a periodical statement of the accounts rendered. The receipts and disbursements are specified in so general a form that, without a minute examination of the vouchers, the contributors have no alternative but to trust implicitly to the fidelity of the auditors and the honour and prudence of the officials who direct the business of the organisation. The auditors, from habitual reliance on the trustworthiness of the board of management may unconsciously shirk their duties; vouchers may be "cooked;" and the annual formalities of presenting, passing, and publishing the accounts may be gone through without remonstrance or complaint, or indeed much serious thought of any kind on the subject, while public confidence may be systematically abused and the funds wasted by those who have the administration of affairs.

Now it may perhaps appear to some that only by an unwarrantable license could these remarks have any application to the disbursement of the proceeds derived from rates and taxes. Let us not be supposed that we insinuate any sweeping charge against parish overseers and boards of guardians indiscriminately. But more than once we have taken occasion to allude to the uneasy feeling which pervades the community in consequence of the oppressive accumulation of rating burdens. There is, in fact, a growing suspicion that the manner in which assessments are made and rates expended in some quarters calls for special investigation, and we believe that nothing short of such a step will give complete satisfaction to the public



in its present humour. Official statements, in the form in which they are usually published, do not meet the case. The annual report of the Local Government Board, though in many respects a valuable document, is to the general reader simply a wilderness of statistics, in which he loses himself. People want to get at the particulars lying behind the gross amounts which are tabulated, and act occasionally, at least, as their own auditors; and, if Parliamentary assistance be not accorded them for that purpose, it may be incumbent on them in their several parishes to appoint a local commission from their number to scrutinise vouchers, so that what is going on behind the scenes may be proclaimed on the housetops. Where economy is practised the reputation of rating authorities will be enhanced, and should, unfortunately, instances of reckless expenditure be detected, it is to the interest of the public that these should be exposed. Indeed, the suggestion we have just made has been anticipated by the ratepayers of the parish of Paddington. Like the inhabitants of many other localities, they have grown impatient of the astounding advance which has taken place of late years in the rates and assessments within their boundaries, and have formed themselves into an association to examine the parish account-books in order to ascertain if the rates are wisely and justly applied. They have observed, with that satisfaction which is shared by all right-minded citizens, that pauperism and crime in the metropolis are rapidly on the decline, and naturally expected to find some corresponding relief from the load of rates they are compelled to bear. But, instead, their hopes have been rudely disappointed by their already onerous liabilities to the collector being augmented. They appointed two respectable tradesmen resident in the parish to investigate matters, and the disclosure of wasteful expenditure which has resulted justifies our worst apprehensions, and urgently calls for the establishment of organizations similar to the one started at Paddington in every parish in the kingdom. The items of an account, as a rule, are proverbially dry, but in the present instance the extracts we are able to furnish so abound in flagrant references to the liberal fare in which the overseers have been accustomed to indulge at the expense of the ratepayers that the document is almost as suggestive as the *carte* of a first-class French *table d'hôte*. We are only favoured by the Paddington Association with an analysis of one or two gross items in the list, and we presume they mean to imply that these are an average specimen of all. They inform us, however, to our dismay, that for some of the amounts no vouchers were forthcoming.

Under the head of Poor-rate account from April 1, 1876, to December, 1876, there are two extremely vague specifications, that may perhaps cover a variety of those "creature comforts" to which these trustees of the public finances appear to have helped themselves at the cost of their fellow-parishioners; and without details we can offer no comment on the sums given, except to remark that the public will probably judge the nature of them by the sequel. The most entertaining and instructive portion is that which comes under the "General Rate Account," and relates to "Refreshments." In five months, from 5th April to 9th December, £107 15s. 10d. was spent by these exemplary custodians of the rates, though that sum does not by any means exhaust the "refreshment" expenditure in the period named. It is pretty certain that under the heads of "Petty Disbursements" and "Dust and Ashes Committee," which frequently occur in the excerpts forwarded us, money has been frittered away in a manner equally reprehensible. The following particulars belong to one of many bills of the same description which might be similarly analysed:— "September 25—Finance and Assessment Committees: apartments, 5s.; attendants, 8s. 6d.; 18 luncheons, £3 3s.; 17 dinners, £7 13s.; ale and stout, 7s.; sherry, £1 4s.; port, 18s.; brandy, 1s.; seltzer, 3s.; hock, £4 10s.; tea and coffee, 8s.; cigars, 12s.; dessert, £1 5s.; servant's dinner, 1s. 6d." Here is an extract from another "refreshment" bill, amounting to £29 1s. 6d., consumed on the 24th of March, illustrative of the self-denying propensities of these philanthropic public servants. We hesitate somewhat to enumerate the details lest we should unwittingly cause a throng of parishioners with plenty of time on their hands and penchant for good living to offer themselves as candidates at the next election, and so frustrate the reforms sought to be effected. We have heard of the pleasant life of a genus called "Guineapigs;" but after this statement it is doubtful whether a parish overseer may not have the best of it: "Nineteen luncheons, at 3s. 6d., £3 6s. 6d.; 18 dinners at 9s., £8 2s.; 8 bottles of sherry, at 6s., £2 8s.; 4 bottles of port, at 9s., £1 16s.; 9 bottles of Erbach, at 6s., £2 14s.; 1 bottle of Burgundy, 7s. 6d.; 4 bottles of claret at 4s., and 2 do. at 5s. 6d., £1 7s.; tea and coffee, 7s.; brandy, 4s.; cigars, 21s.; dessert, 25s.; soda, lemonade, and

seltzer, 4s.; wine and minerals ordered by the Chairman and Mr. Fisher, £1 15s. 6d.; pastry, puddings, vegetables, gravies, 8s. 10d." In the "Petty Cash Account" there is a long list of items, one of which is especially mysterious. "June 24: Paid cab hire six members of Dust and Ashes Committee to shoot, per Mr. Flood, 12s." Whether the expedition here referred to was of a professional or recreative character does not appear; but, in any case, the cost was borne by the public funds. The ratepayers are not so unreasonable as to grudge cab hire and refreshment within proper limits to those who devote their time to parochial interests; but if boards of overseers have degenerated, as they would seem to have done at Paddington, into institutions for absorbing the hard-earned money of the ratepayers to a great extent in gormandising and pleasuring, the sooner they are superseded the better. We have said enough to incite ratepayers everywhere to exercise strict vigilance over the administration of the parish funds, and it will not surprise us to learn that abuses will be discovered in many directions where they were least expected to exist.

### RISE OF WAGES IN THE BUILDING TRADE.

In London, and throughout the provincial districts in England and Scotland, disputes are still cropping up, and are likely to increase as the year advances. The masons in London are asking a rise of wages, to take place in July next—a reduction of the hours of labour from 52½ to 50. The Associated Master Builders are of opinion that in the present state of trade a rise of wages is out of the question, and that building has become so costly of late, that many builders have closed their works. In several districts in England and Scotland the building operatives have asked for a reduction of the hours of labour, and an advance of more or less per hour in their present rate of wages. On the other hand, in a few districts, that master builders are giving notice to their workmen of a reduction in their wages. We hope in all cases "strikes" and "lock outs" will be avoided by a conference or friendly arbitration, for undoubtedly all prolonged disputes favour foreign competition to the injury of British and Irish workmen.

### THE "O'CONNELL" MONUMENT.

We know not how many public statues and monuments have been erected since a memorial to the "Liberator" was first mooted, some twelve years ago. We have always been of opinion that the work should have been entrusted to a resident artist. We have often drawn attention to the works turned out by the gentleman by whom the "Sir John Gray" memorial is to be carried out—Mr. Thomas Farrell, R.H.A. We understand that a meeting of the committee is summoned for the 6th inst., at the Mansion House. We would suggest that there should be a large attendance of members and subscribers, and a determined stand made to force on a settlement of the matter. It may be taken for granted that Mr. Tenniswood will never complete the order.

### THE SIR JOHN GRAY MEMORIAL.

We are glad to find that a resident Irish sculptor has been selected to carry out the above memorial. The following is the resolution passed unanimously by the committee:—

"That we adopt the model and pedestal prepared by Mr. Farrell, sculptor, as a memorial to the late Sir John Gray, to be placed in Sackville-street; that the price to be paid for same to be £1,600 for the figure, and £400 for the pedestal, and that same is to be executed and placed in position within 18 months from this date."

The height of the principal statue is to be 10 ft.; the accompanying figures to be of heroic size—8 ft.; the entire height 25 ft. by 18 ft. The material used in the entire work, statues, pedestal, and basin, to be campanile marble; the steps underneath to be of granite. The total cost to be £1,000, including all expenses of erection, &c.

### CORPORATE ITEMS.

#### THE CITY BASIN.

At a late meeting the Town Clerk read a letter from the Secretary of the Midland Great Western Railway Company, reminding the council that the company had introduced a clause enabling them to acquire by purchase from the Corporation the city basin, and desiring to know the lowest terms on which the Corporation would be prepared to negotiate for the sale of it. The matter was referred to the Waterworks Committee.

#### BRAY WATER SUPPLY.

At the same meeting the Town Clerk reported that he had been served with a summons and plaint, at the suit of the Bray Commissioners, for the recovery of £5,000 for alleged insufficient supply of water to Bray Township, and giving notice of the intention of the commissioners to apply for a writ of *mandamus* to compel a sufficient supply. It was resolved to defend the action.

#### CORPORATE PROPERTY.

*Re* middlemen, landlords, and corporate property, Mr. Gray moved a resolution to the effect that the intention of the council, when it amended the 55th by-law, was to afford protection on equitable terms to the then occupiers of the corporate property, and that in case of any middleman serving notice to quit on the actual occupier before the expiry of the original lease, in the hope of obtaining the exceptional favour of a lease without public competition; under no circumstances would such favour be granted, but on the contrary the Council would decline to grant such a person any lease whatever.

#### DUBLIN IMPROVEMENT BILL.

At a meeting held on the 23rd ult. the Town Clerk read a letter from Mr. Dennehy, announcing his resignation as a member of the Dublin Improvement Bill Committee. In a second letter Mr. Dennehy stated that he had resigned because he was of opinion that it was mandatory on the committee to have at once informed the council of the fact that the bill had been thrown out, on standing orders, and to have asked for further instructions and powers from the council; secondly, because the committee had not brought the bill before the council to be considered clause by clause. The chairman of the Dublin Improvement Bill Committee stated that the proposed bill had been entrusted to parliamentary agents for revision.

#### THE CITY MARSHAL.

The Town Clerk read a report from No. 3 Committee on this subject, embodying a report of Mr. Francis Morgan, law agent, in which it was stated that he (Mr. Morgan) had received from Mr. George Waters, Q.C., his written opinion, to the effect that although the appointment to the office of marshal has been, with one exception, in the reign of King James II., exercised annually, the Corporation should not now appoint to that office at a fixed or any rate of salary, nor interfere with the statutory fees which will legally belong to the marshal, to be retained to his own use, subject to payment of his clerks and office expenses. Mr. Morgan had also conferred at length with Mr. John Carroll, present acting marshal, and he stated that he was willing to accept reappointment from the Council in such form as the Corporation shall decide.

### TO CORRESPONDENTS.

ROYAL HIBERNIAN ACADEMY EXHIBITION.—There are several paintings and other objects of fine art of high merit in the present Exhibition, and not a few of those by native artists, are deserving of commendation. We may on an early occasion speak of some of these in detail.

THE "IRISH SOCIETY."—The motion by Mr. Lewis, the member for Derry, for the appointment of a select committee to inquire into the management of this society, and to carry out needful reform, was rejected by a majority of the House of Commons on Tuesday night. We have little doubt that the reforms called for will sooner or later be accomplished.

IN LIME.—You omitted sending your name and address. ERRATUM.—Page 64, col. 1, line 35, for *small* read *ample*. RECEIVED.—R.D.S., C.E.—A Student—H. C.—A Carpenter—Architect (Westminster)—P.L.G.—M.D.—K., &c.

### HOME AND FOREIGN NOTES.

IRISH MANUFACTURES.—A meeting will be held to-day at the Mansion House, to take steps to co-operate with the Commissioners of the Paris Exhibition of 1878.

PATENT LAW REFORM.—A conference will be held on Monday, the 6th inst., by the Society of Arts, for the purpose of discussing the provisions of the Patent Law Amendment Bill, now before the House of Commons. The subject will be introduced in a short paper by Mr. H. Freeman Wood, the Assistant Secretary of the Society, and resolutions will be proposed to the meeting for adoption.



**THE ASSISTANT COUNTY SURVEYORS.**—In the House of Commons, Mr. William Johnston asked the Chief Secretary for Ireland if he intended to bring in a bill to improve the position of the Assistant County Surveyors, by increasing their salaries, and enabling them to obtain superannuation allowances. Sir M. H. Beach stated that he had no such intention. It is, however, believed that the Government has not overlooked entirely the claims of those gentlemen, and that, in the event of the introduction of a bill for the reform of the Grand Jury Laws, that measure will contain provisions dealing with their position and salaries.

**SOCIETY OF ARTS.**—At a meeting of the Society of Arts on the 13th ult., Mr. George Godwin in the chair, Professor Barff read a very instructive, interesting, and indeed practically valuable paper on Zinc White as a paint, and the treatment of iron for the prevention of corrosion. A long discussion followed on the part of several members. If the process described turn out completely successful, and not very expensive, it will be of immense value in the preservation of iron, as that material is now utilised in thousands of ways for modern wants. The first portion of the paper will be found in an other column.

**THE CORPORATION AUDIT.**—The Government Auditor has surcharged several illegal payments made by order of No. 1 Committee of the Corporation. For a considerable time past seven men, represented as being employed in Whitehorse Yard, but who did not work, have been receiving each 7s. a-week for their services, or in the aggregate £2 9s. per week. One of the recipients of the bounty was a pauper inmate, and another, whose wages were drawn weekly, had been dead for two years. What would an audit extending over the last ten years prove, we wonder? Need we marvel at how the money goes on Cork-hill!

**INSTRUCTION FOR MINERS.**—The *Athenæum* says that Mr. G. L. Basset has built at Camborne, in Cornwall, a laboratory, and fitted it up with all necessary conveniences for assaying, or for chemical analysis of ores. He has handed this building over to the Miners' Association of Cornwall, for the use of the teachers and of any of the members of the classes. Beyond this, any miners desirous of making investigations can do so by obtaining permission.

**A STATUE TO LIEBIG.**—From a circular recently issued by the general committee intrusted with the duty of collecting subscriptions for the erection of a statue to Liebig, it appears that the sum total contributed up to January 1, 1877, amounts to over £7,000, after the deduction of necessary expenses. Russia contributed over one half of the receipts acknowledged in this third and last report. Since the decision to provide Giessen as well as Munich with a statue, the authorities of the former place have selected a fitting locality for the memorial, and laid it out in a tasteful manner.

**PORT AND DOCKS BOARD.**—The report of this Board is issued, dealing with the shipping, tonnage, dues, the work of deepening, dredging, and otherwise improving the river at the North and South Walls. We hope to deal with the matter in detail hereafter.

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We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.

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## PORT AND DOCK IMPROVEMENTS, DUBLIN.

THE report of the Dublin Port and Docks Board for 1876 affords satisfactory proof of the progress that has been made with the works connected with the improvement of the harbour of Dublin. There has been a steady progress in nearly all matters. In the matter of shipping, 1,879,886 registered tons of shipping entered the harbour last year, exceeding the previous year by 202,343 tons, and an increase in the dues on account of tonnage to the extent of £7,150 0s. 9d. over 1875. Several classes of trade show an increase—steamers from Continental ports, sailing vessels, vessels with corn, and vessels with other traffic. In the coasting and general cross-channel trade in steamers and sailing vessels there has also been an increase of several thousand tons; but while coal trade steamers increased to the extent of 24,038 tons, there was a slight decrease in sailing vessels engaged in the same trade to the extent of 1,310 tons.

The Dublin Port and Docks Board Act of 1876, which received the royal assent in June last, enables the board to enlarge or re-build Carlisle Bridge, and to construct an opening bridge opposite Beresford-place. The working plans and specifications are now in course of preparation, and a loan for the necessary work from the Commissioners of her Majesty's Treasury is effected, on favourable terms, to carry out the work. The providing of this bridge accommodation has been for many years advocated in these columns, and much correspondence has taken place in these pages as to its construction and site. The bill for transferring the Poolbeg Lighthouse from the Commissioners of Irish Lights to the board was also passed last June. The amount necessary to put the lighthouse in a permanent state of repair, fixed at £5,200, has been paid to the board, and the lighthouse taken over. The engi-

neer in his report states, that the work of the south quay deepening reflects much credit on the contractor, Mr. Doherty. This work was commenced in 1867, and was concluded last year. The total length of the new wall is 2,293 ft., 1,780 being on Sir John Rogerson's-quay, and 513 ft. on Great Britain-quay. As each length was completed the berths in front were dredged out to a depth of 22 ft. at low water in line of keel, enabling oversea vessels to be afloat in all states of the tide. The work of deepening the steam berths on the north quay has also been satisfactory, the last portion of the new quay wall at the west section being finished, the berths opposite dredged, and open to public use in last July. The total length of quay wall built since the commencement in 1871, inclusive of the pier heads at the entrance to the Royal Canal, is 1,717 ft., 894 ft. on the east, and 823 ft. on the west of the canal. Here the depth of water dredged in line of keel is from 15 to 16 ft. at low water, thus enabling cross-channel steamers at these berths to sail at fixed hours independently of tide as in former years. The total cost of the south quay deepening amounts to £131,302 4s. 1d. The total expended on the North Wall deepening since the commencement has been £71,194 8s. 2d.

In respect to the north quay extension, during last year the superstructure of the north face of the work was finished to coping level for a length of about 390 ft., and 369 blocks were laid, making with previous years a total length of 911 ft. of blocks built and placed in position on the north face of the work. Some gas-lamps have been erected on the river side of the extension quay, and considerable progress has been made with the filling-in between the walls. Last year, however, owing to the extraordinary demand for ballast, the dredge boats were withdrawn from the work to supply ballast for shipping, in consequence of which the filling work in connection with the north quay is not so forward as it would otherwise have been. Despite, however, of the delay, the first block of the extension, which was laid in 1871, showed at the end of the year that 2,032 ft. of blocks was laid, and 1,927 ft. of the wall completed up to coping level. Within a space of seven years, including both sides of the river, there has been an aggregate length of nearly 6,000 ft. of quay walls built in the port, of which 1,717 have been for cross channel steam trade, and the remainder chiefly for the larger vessels engaged in the foreign trade. No bad progress this. The work for cross channel steam trade cost £77,589, and that for the larger vessels £247,093.

In regard to shed accommodation, the third length of the shed opposite the City of Dublin Steam Packet Stores was finished and occupied, and a junction formed with the old shed to the westward in October. The paving and flagging are in course of completion; the total length of the new is 757 ft. Tramways and turntables have been constructed on the quay opposite the stores of the London and North Western Railway Company, at the cost of the company. This contract may be said to be finished.

At the Custom House Docks needful improvements have been completed. The timber framing of the old roof of the tobacco store has been repaired and strengthened. These stores, to our mind, would need an entire re-modelling and building, as they have undergone constant repairs for many years. Ten hydrants, and 680 yards of new

water main have been laid, the drinking fountains coming in for reparation at the same time. A new and commodious bottling house, 122 ft. long, has been erected alongside the whiskey store, connecting the vats with the store, and preventing trespassing. A partition wall, 145 ft. in length, has been built in the banquet hall to separate the grain from the whiskey stores; and a new doorway opened to give access to the latter without passing through the grain store. The paving of the roadway on the south quays at the deep water berths on Sir John Rogerson's-quay, began in 1876, have, to a length of 527 by 40 ft in width, measured from the face of the wall, been finished. This is certainly an advantage to the public, and our merchants in particular, as the grain and other heavy laden carts constantly cut up the roads, and kept them in a bad condition.

At Poolbeg Lighthouse the last of the large blocks has been set, and the remainder of the work sanctioned by the Board of Trade, finished under the direction of the Irish Lights, early in 1876.

In dredging operations there was a total tonnage of 1,023,925 tons; this includes the matter dredged on the north quay, deepening steam berths, trawler pond, North Wall Basin, and maintaining and improving the river. The engineer remarks that the large increase of tonnage dredged in 1876 over that of the previous year was due to the completion of the dredging in front of the new quay walls. The dredges were thus enabled to work longer at straightening and deepening the channel east of Ringsend, where the work is more regular and less interrupted than between the quays. We see the name of Essex Bridge, though changed to that of Grattan by the Corporation, is still retained in the report of the Port and Docks Board, which notes in a sentence that lamps, of a design submitted by the Municipal Council, were erected on the parapets of the bridge last August. Hold! we must stand corrected, for in the West Quay Walls and Bridges Account we find the word Grattan in place of Essex. Old names die hard, and though acts of parliament were often passed to annihilate them, they have outlived their prohibition, as the names of many places in Irish towns and cities attest. We have not time and space at present to give a digest of the accounts of the board, but we are glad to see that the receipts of the Custom House Docks exhibit a balance in their favour to the amount of £4,275 odd. There are some items in the accounts of the board of which it would not be amiss to have some detailed information.

We have given the substance of the reports of the secretary of the board, and its able engineer, Mr. Bindon B. Stoney, and on the whole we are satisfied, making due allowance that the work of the board is performed efficiently, and that our citizens with old memories cannot but be satisfied at the great and marvellous improvements that have taken place during the last quarter of a century. To those interested in the history of the shipping interest, nothing can be more instructive or suggestive (although a very dry subject), than an examination of the tables given in the present as well as previous reports of the board, exhibiting a statement of the registered tonnage that entered the Port of Dublin from the year 1786 to 1876, a period of ninety years.



## THE PROPOSED SCIENCE AND ART MUSEUM.

THE Royal Irish Academy has fought a good fight, and the manly spirit evidenced by it some months since has borne good results. The Government, having given up a large portion of their objectionable demands, and conceded the conditions sought by the Academy in the matter of the re-transfer of its vote from the charge of the South Kensington Department to that of the Irish Government, and also as to the future provision for the maintenance and augmentation of the Museum, and its preservation in Dublin under the care of its present owners, the council reported that these terms ought to be accepted. After a debate of some length, and objections to the wording and meaning of paragraphs 2 and 3, the recommendation of the council was adopted. As we read the conditions, we take them that the Government is to have no control over the Academy except in the matter of its museum, and it will have none as regards the papers to be read at its meetings, or its library. There is one drawback, however, for while the Academy stipulated not only for the maintenance of the present collection, and that funds be provided for its increase, the power rests with the Government to purchase any antiquities that it may be thought desirable to purchase. As the Museum will be more or less under the control of the Science and Art Department, future purchases of Irish antiquities may or may not be made for the Museum in Dublin, and may alternately become birds of passage in "loan collections." We certainly regret (and not from any party, political, or ideal motive) the transfer of the control of the Museum to London. It was a sort of centralization, to encourage which would be the reverse of healthy. The Royal Irish Academy has heretofore been fully entitled to a much larger vote of money than what it has received, and it has been well said that what would be accounted a duty of the State in England, is put forward in this country as the "liberality of the Government." We would like to see every country managing its own local institutions; and for long years the Royal Dublin Society and the Royal Irish Academy, both under an Irish Parliament and an Imperial one, have proved their capacity for the work. Some few years will yet pass over before the new building for the proposed Science and Art Museum will be ready to receive its new occupants. Let us hope in the meantime that nothing will be wanting on the part of the council and members of both our Dublin institutions, to make the best of their opportunities. Governments may change, and conditions be subjected to new interpretations, and supposed advantages in course of time wear a new complexion. Some months since we felt strongly, and wrote strongly on the then Government proposals, but a great change for the better has since been effected, and by their acceptance we are relieved from the necessity of carrying our criticism further. We are better pleased, but it would be a bit of hypocrisy on our part to say that we are fully satisfied with the terms obtained by the Royal Irish Academy.

**THE ALLIANCE GAS COMPANY.**—The directors have resolved to recommend a dividend of 10 per cent. upon the profits made during the past half-year. A sum of over £5,000 remains, to be carried over to next account.

## THE PRESERVATION OF THE IRISH LANGUAGE.

WE are glad to see that a Society for the Preservation of the Celtic Language as used in Ireland has been formed, and a provisional committee appointed for carrying out this most desirable object. It is to be hoped that this last effort will be more successful than former ones. The committee includes well-known names connected with our public institutions and learned bodies, and if irrespective of politics, sect, and party, the work undertaken is prosecuted with energy, there is no reason why it should not be successful. The sympathies and practical assistance of Irishmen as a whole will, however, be needed, for without these the movement will die out, and add one more to the disheartening failures that signalised former years in the present century. We have more than once in the IRISH BUILDER spoken in favour of such a movement as that which is now set in motion; and a few months since our co-labourer of the "Advorsaria Hibernica" column penned a note, which it will not be amiss to reproduce. He writes thus:—

"Is the Celtic language to die out, and will no more than very feeble attempts be made now and again to keep it alive? Each census return shows that, as a speaking tongue, it is declining more and more. Had we the spirit of the Welch, the Irish language would be taught in every National school, and our Catholic fellow-countrymen could have it taught in the Christian Brothers' schools, if they made an effort. The little that is taught in some of our colleges or universities has, or will have, little or no effect in leading to the retention of the language by the people as a body. The Welch have several newspapers, some printed in the Principality and others outside it, in which news and reports in Welch and English are given. The Germans, French, and other foreign nationalities in London have their own newspapers, printed in their own tongue. Even the Jews in London have their newspapers, and, though the majority of them can speak English, they can also read and talk their own Hebrew tongue. The epitaphs on the tombstones and monuments in their own cemeteries are in Hebrew, and sometimes in both languages. Here are we, taking us at large, speaking the language of another nation, and not knowing how to speak our own mother tongue. Indeed, there are a large body of our people ashamed of their native tongue, and are prone to deride a native from the banks of the Shannon or more westward who evidences a knowledge of Celtic by an unmistakable honest *brogue*. Learn French and German by all means, it will be most useful; learn English too, and speak it and write it properly, if there be a proper way of writing it or pronouncing it, for English will be indispensable to you. Learn Irish, if you are Irish born; learn to write it and speak it, nor be ashamed of it, and you will find it will be an accomplishment and an acquirement that will not be only pleasing to you and useful to you, as an ordinary individual, but valuable to you if you are a student of history. We are not clannish or prejudiced, but we are national apart from party politics, and, therefore, we would preserve and perpetuate the Celtic tongue, as we would preserve from ruin our national moanments."

Now, the preliminary address of the new society is based more or less on the lines laid down by our co-labourer, as an extract or two will show:—

"Against no other people can the reproach of neglecting their native language be urged. Notwithstanding their intimate social and geographical connection with England, the Welch are assiduously cultivating their native language, which is one of the offshoots of our more ancient Gaelic. They have several daily and weekly newspapers, and other periodicals, publishing in their own language, which is now taught concurrently with English in nearly all their schools. The Celts of Scotland are acting in a similar spirit. But in Ireland little is being done to save our native tongue from extinction."

Further on the committee indicate the method by which they purpose to succeed in their labours:—

"They expect, however, to be able to promote the formation of Irish classes wherever facilities exist throughout the country; to publish elementary works from which the language can be easily learned; to have provision made for the teaching of Irish in schools; to afford inducements to pupils to

acquire a knowledge of it; to encourage a familiar use of the language by those who know how to speak it; and by these and other means to create such a tone of public feeling as will utterly banish the ignorant and unpatriotic notion (of foreign origin) that our native tongue is one which no Irishman of the present day should care to learn or be willing to speak. In a word, we desire to arouse the patriotic feeling of the Irish people on this most important subject, and have this question considered in our public meetings and find a place in the national programme. If once the Irish people determine that their language shall not die, it will soon be taught in our primary and intermediate schools, especially in such as are situated in those parts of the country where it is still spoken. We hope soon to be in a position to support a weekly or fortnightly journal in our native tongue."

The means proposed are, we consider, the right ones; as far as they go, they are proper, practical, and feasible. The National and Christian brothers, and other preparatory and collegiate schools, must be acted upon, for in these the seed that will afford a future rich harvest can now be the more easily sown. This teaching of the mother tongue is no political or religious question, but a national one, that should command the undivided support of all classes. The teaching of Irish was advocated by the English William Bedell, the Bishop of Kilmore, while in Ireland, and afterwards by George Berkeley, the Irish philosopher and Christian Bishop of Cloyne. Though these able men advocated the teaching of Irish for the purpose of "converting the native Irish" to another faith, yet they were doing a service in perpetuating the Gaelic, and they may be well forgiven at this date by those of our countrymen belonging to a different creed. As a matter of history, laws were passed in the 3rd Edward IV., and in the 28th Henry VIII., prohibiting the speaking of the Irish language, and enforcing the English. The passing of these acts we consider was a fatal mistake, but we are not disposed to touch upon the political or religious bearings of the case. The starting of a newspaper, printed partly or wholly in Irish, was one of the projects of Davis upwards of thirty years ago, and he also advocated the requiring of teachers of National schools in the Irish-speaking districts the knowing and teaching of the Irish language. To make the effort more likely to succeed he thought a taste should first be created for the acquirement of the language among the upper and middle classes, for what would become fashionable with these classes would be imitated sooner by their humbler brethren by the mere force of example. A great change, however, has taken place in this country since 1845. Knowledge, in every branch of literature, science, art, and handicraft, is more diffused through the medium of a marvellously extended newspaper and periodical Press. Facilities are still many for learning the native tongue, although the exodus through the Irish famine, and constant emigration for several years after, have eliminated from our country several thousand of Irish-speaking natives; still, not only in Irish cities, but in several cities and towns in England and Scotland, there are hundreds of humble Irishmen speaking the language of their ancestors. The majority of them are of course unlettered, but there are many of them though they can only speak, and not write in their native language, yet can otherwise write and speak English tolerably well for men of their humble position. In our journeys of late years through the east and west of Scotland, and the north and south of England, we have met with many intelligent Irishmen speaking their mother tongue, and not a few in the mining districts of Wales. It is surprising with what facility Irish workmen in the Welch districts acquire in a short time a knowledge of the Cymri, and how readily the native Welch and native Irish respectively, speaking their own languages, understand each other. We even find the English-speaking Irishman located in Wales, acquiring a knowledge of the Welch language in a short time, while the English workman made but small progress, and seldom suc-



ceeded in speaking it. Welchmen, too, like Irishmen, acquire a knowledge of speaking the English language very soon, as several instances that came under our observation proved. On the London Press, and connected with literary publications, we have met with Irishmen having a fair knowledge of their native language; and in two instances recently Irishmen as correctors or readers on London journals, who could speak and write their own language. We found one of these correctors also with a very fair smattering of Latin, French, German, Greek, and Hebrew, in addition. A knowledge of the Irish language would be an acquisition generally to correctors of the Press in large newspapers and printing establishments, and would often save much time, and obviate the necessity of enlisting the special services of professors or students at a distance. The want of modern, scientific, and technical terms in the Irish language has been pointed to as an obstacle to its use in any general way, but what has been done in connection with other Continental languages can also be imitated in respect to the Irish. The Germans adopted several existing terms, many of which were derived from Latin, Greek, and other languages; and within the last century numerous foreign words have been absorbed into the English language. We have probably written enough at present to show the utility of the knowledge of the Irish tongue in these days, so rife with missions, commissions, explorations, exhibitions, and researches, historical, scientific, and archaeological. We have a history, a music, and a language worthy of each other, and racy of the soil, and it is only by the preservation of the latter that we can truly interpret the former, and enable the intervening to live in its native dress, *adscripti glebae*, indigenous and inseparable.

#### THE ROYAL IRISH ACADEMY.

AN adjourned meeting of the Academy was held on the 5th inst.,

SAMUEL FERGUSON, Esq., Q.C., LL.D.,  
in the chair.

Dr. Ingram announced that a communication had been received from Dr. Stokes, requesting that the Academy would not re-elect him as president on the 16th of March. Dr. Ingram added that the stated meeting of the Academy would be the occasion upon which to record their sense of the past services of Dr. Stokes as president.

Dr. Ingram read a report of the council on the proposed Museum of Science and Art. The report, after recalling the state of the negotiations when the Academy had before it the last report of the council on the subject, proceeded to notice what steps had been since taken. A deputation had waited on the 29th of June last on their Excellencies (the Lord Chancellor and the Vice-Chancellor), at Dublin Castle, and presented a memorial, chiefly protesting against the transfer of the vote to the Academy to the charge of the Science and Art Department. The report continued:—About this stage of the negotiations a sum of £500, portion of the £2,000 voted to the Academy by Parliament (in addition to £500 already received through the usual channel) was placed, unasked for, to the credit of the Academy by the Paymaster-General, and subsequently we received an intimation that it had been issued by the Science and Art Department. No reply to our communications, however, was received for some months. An intimation having been received from the Chief Secretary, that he desired a conference on the subject at issue between the Government and the Academy, the secretary of council had interviews with him, which resulted in the adoption by the council, on the 4th of December, 1876, of the following resolution:—

“That the council is prepared to re-open negotiations for the transfer of its museum to the new establishment in Dublin, contemplated by the

Government, on the following basis, viz.:—That after such transfer, if it should be agreed upon, the part of the Academy's grant given for the care and maintenance of the Museum shall be accounted for by the Department of Science and Art, the Academy retaining the same amount of control over the management of its collection as is enjoyed in a similar case by the Scottish Society of Antiquaries, and due provision being made for its preservation in its integrity as a national collection in Dublin, whilst the rest of the Academy's grant shall remain on its present footing, and shall continue to be accounted for as heretofore by the Chief Secretary for Ireland.”

On the appearance of the Civil Service Estimates for 1877-8 early last month, it was found that the Academy's Parliamentary grant no longer appeared amongst the Irish votes, but under those to be accounted for by the Science and Art Department. It was, therefore, all the more gratifying to the council to receive immediately afterwards the letters which it now hastens to communicate to the Academy. They are arranged in chronological order:—

Science and Art Department,  
South Kensington, S. W.,  
8th February, 1877.

SIR,—The Lords of the Committee of Council on Education have given their careful consideration to Sir Michael Hicks Beach's letter, dated 7th November, 1876, to the Secretary of the Treasury, on the subject of the re-transfer of the vote for the Royal Irish Academy to the Irish Government, which was forwarded by Mr. Law to this department on the 16th November.

I am to request that you will inform the Lords Commissioners of her Majesty's Treasury, that the Lords of the Committee of Council on Education are glad to find that the general scope of the proposals of the Royal Irish Academy, as they anticipated would be the case, is not inconsistent with their views as expressed in my letter of the 8th February, 1876.

It is hardly necessary to remind their lordships that the scheme proposed in that letter was always considered to be open to such modifications in details as might appear to be desirable, after the Government had had the advantage of hearing the criticisms upon it of those gentlemen in Ireland who, from their knowledge and experience, have a just influence in such matters, provided always that the modifications did not interfere with the ultimate success of the great object which her Majesty's Government had in view, namely, the establishment in Dublin of a comprehensive National Museum of Science and Art, which has been generally desired for many years.

My lords are, therefore, prepared to accede to the suggestion of the Royal Irish Academy, that the same course should be taken respecting the collection of the Academy as that which was adopted by the Treasury with regard to that of the Society of Antiquaries of Scotland. Their lordships might not unreasonably have demurred to placing the Royal Irish Academy in a similar position to the Society of Antiquaries of Scotland, inasmuch as the collections of the latter were all acquired by private funds, whereas a large proportion of those of the Royal Irish Academy have been purchased out of funds provided by Parliament; but my lords are willing to waive these considerations, so as to consult, as far as possible, the wishes of the Royal Irish Academy, and they propose to follow closely the precedent of the Treasury minute of 1851, respecting the Scotch Society, only introducing such modifications as are absolutely required by the different circumstances of the two cases.

My lords, therefore, desire to call the attention of the Lords Commissioners of the Treasury to the appended copy of a minute (in which the necessary alterations are shown in red ink) as embodying the conditions under which the Lords of the Committee of Council on Education are of opinion that the proposals of the Royal Irish Academy should be accepted.

On receipt of a resolution of the Academy accepting the conditions appended, and undertaking to transfer their collections to the new Science and Art Museum, as soon as the building is ready to receive them, my lords will be prepared to recommend to the Lords Commissioners of her Majesty's Treasury that the votes now taken for the Royal Irish Academy shall be re-transferred to the Irish Government, it being understood that the votes now taken for museum purposes by the Royal Irish Academy shall cease as soon as the Science and Art Museum is ready to receive collections.—I have, &c.,

(Signed), SANDON.

The Secretary to the Treasury.

#### CONDITIONS.

The entire collection of antiquities, coins, and medals, belonging to the *Royal Irish Academy*, with such additions as may be hereafter made to them, and the cabinets, glass cases, &c., in which they are contained, to be conveyed to the *Lords of the Committee of Council on Education*, to be retained in Ireland on behalf of the public.

Fit and proper accommodation to be at all times provided in a public building for the preservation and exhibition to the public of the collection of antiquities, and for the meetings of the *Royal Irish Academy*; but no stipulation can be entered into permanently to appropriate particular apartments in the new Museum building to these objects.

The charge and custody of the collection of antiquities to be entrusted to the *Royal Irish Academy*, subject to such regulations and special directions as may from time to time be prescribed by the *Lords of the Committee of Council on Education*.

The funds required to alter and adapt the apartments in the *Science and Art Museum* for the reception of the collection, to furnish the requisite means for the preservation and exhibition of the Museum, and to pay the salaries of additional servants, to be provided by the *Lords of the Committee of Council on Education*, by an estimate to be submitted to Parliament.

My lords are of opinion that it would not be conducive to the object which all parties have in view, in making this arrangement, that express stipulations should be entered into with the *Royal Irish Academy* on detailed points of management; but the members of that society may rest assured that it will be the desire of the *Lords of the Committee of Council on Education* so to exercise the general control which they must retain over all collections exhibited at the public expense as to leave the *Royal Irish Academy* as unfettered in the charge and management of the museum as circumstances will allow.

[The alterations shown in red ink in the original are italicised above.]

Treasury Chambers, 17th Feb., 1877.

SIR,—I am directed by the Lords Commissioners of her Majesty's Treasury to transmit to you herewith copy of a letter of the 8th inst., from the Science and Art Department, and of the enclosure therein, on the subject of the re-transfer to your department of the vote for the Royal Irish Academy; and I am to state, that if the proposal now made meets with the approval of his Grace the Lord Lieutenant, my lords should not feel called upon to make any objections to it.

W. H. SMITH.

Rt. Hon. Sir M. H. Beach, Bt., M.P.

Dublin Castle, 26th Feb., 1877.

SIR,—Adverting to former correspondence relative to the transfer of the antiquarian collections, commonly known as the Museum of the Royal Irish Academy, to the National Science and Art Museum, which it is proposed to establish in Dublin; and also to the transfer of the charge of the vote for the Royal Irish Academy to the Science and Art Department, I am directed by the Lord Lieutenant to acquaint you, for the information of the Royal Irish Academy, that his grace has been in communication with the Lords Commissioners of her Majesty's Treasury and the Science and Art Department on the subject, with the view of devising such modifications in detail of the original scheme proposed in Lord Sandon's communication of the 9th February, 1876, directed to the president of the academy, as, while not interfering with the establishment in Dublin of a comprehensive National Museum of Science and Art, would at the same time meet the objections entertained by the members of the Royal Irish Academy to the original scheme, and also to the transfer of the charge of their vote from the Lord Lieutenant to the Science and Art Department. His grace desires me to transmit herewith a copy of a letter dated 17th inst., received from the Treasury, together with a copy of a letter enclosed therein from the Science and Art Department, and in which a modified scheme is proposed. His grace feels assured that the Academy will receive this proposal in the same friendly spirit in which it is made, and he confidently trusts that it will meet with their approval.

T. H. BURKE.

The Secretary, Royal Irish Academy.

It is to be observed that whilst the Government has, on the one hand, stipulated for certain conditions, which *mutatis mutandis* are identical with those to which the Society of Antiquaries of Scotland readily assented, on the other hand—in deciding “that the proposals of the Academy should be accepted”—Government has conceded the conditions sought by the Academy, not only as regards the re-transfer of its vote to the charge of



the Irish Government, but also as to the future provision for the maintenance and augmentation of the museum, and its preservation in Dublin as a Museum of our National Antiquities, distinct from other collections, and under the care and management of the Academy. The council, being of opinion that the Government has virtually agreed to all that was sought for by the Academy either in its own interest or for the benefit of the Irish public, have no hesitation in advising the Academy cordially to accept the terms proposed by the Government, and they recommend the Academy to authorise the council to take all necessary steps to bring the negotiations to a close.

Dr. Ingram moved the adoption of the report.

A lengthened discussion ensued on the head of the "Conditions," objections being urged against the wording of paragraphs 2 and 3, and to the way they might be construed hereafter if they were at present acceded to by the Academy. Ultimately the original motion was put and carried, and Dr. Ingram then moved:—

"That the Academy accept the conditions set forth in the letter of Lord Sandon, of February 8th, 1877, recently transmitted by the Irish Government, and undertakes to transfer its museum to the proposed National Museum of Science and Art in Dublin as soon as the building shall be ready to receive it; and desires at the same time to express its sense of the considerate manner in which her Majesty's Government has met the wishes of the Academy."

With respect to the latter clause of this resolution, he had to say that having had some personal communication on this matter with Sir Michael Hicks Beach, he found the right hon. gentleman most desirous to meet the views of the Academy.

Sir R. Kane seconded the motion, which was adopted.

Mr. Garstin said the net result was to leave them precisely as they were, for the next seven or eight years.

The Chairman—And I trust we shall remain in our own old and beautiful house for many years.

The meeting then separated.

#### THE ADDITIONS TO THE ADELAIDE HOSPITAL.

THE report of this valuable institution has the following:—The extension and improvement of the hospital premises have engaged the attention of the committee, and important steps have been taken towards carrying out these desirable and much-needed objects. Premises in Peter-street, on the east side of the present building, and three houses in Wood-street, at the rear of the hospital, are now in possession of the committee, whereby space has been obtained for the contemplated additions, and contractors will be invited to tender for the erection of these buildings. The additions which it is at present proposed to make consist of a lateral extension in Peter-street of the main building, which it is intended to appropriate to the reception of surgical cases, with an operation theatre, and other buildings in the rear, together with a detached building towards Wood-street, to be used as a fever hospital. To aid in meeting this expenditure a building fund has been established, which (after payment of the purchase-money of three houses in Wood-street, and other property, which can hereafter be used for enlarging the hospital) now amounts to £4,952 6s. 10d. Besides this sum, Colonel the Hon. Charles Crichton has kindly collected among his friends the munificent sum of £3,410. The committee take this opportunity of expressing their warmest thanks to Colonel Crichton for his liberality and zeal in advancing the interests of this hospital, to the funds of which he is an annual subscriber of £25. In accordance with his wishes it has been decided that a new wing shall be called "The Madeline Wing," in memory of his wife. The committee also desire to express their grateful thanks to all

the kind contributors to the building fund, and to impress upon those friends of the hospital who have not yet subscribed to it the great need of their assistance in obtaining the additional sum required to defray the cost of building and furnishing the additions, considered to be indispensable, which they are about to undertake.

#### DUBLIN ARTISANS' DWELLINGS COMPANY (LIMITED).

THE first general meeting of this body was held on Monday last,

Mr. RICHARD MARTIN, D.L., in the chair.

The report and statement of accounts were adopted. The chairman accounted in a manner for the delay that had taken place in the progress of their building operations. They had great difficulty in procuring suitable sites. They had now, however, finally decided upon two, and had entered into contracts for a block in Upper Buckingham-street with Messrs. Meade and Son; and for one in Echlin-street with Mr. John Cunningham, of Dalkey.

The Hon. C. Trench wished to have one matter explained. The Buckingham-street site had cost £1,025, and the buildings would cost £3,883, thus the total cost would be over £100 per tenement. It was questionable whether the company would be recouped for the outlay.

The chairman, in reply, stated that that site would afford also space for two other large blocks.

Mr. Trench said he was quite sure the explanation would be satisfactory. In consequence of the falling ground it was, perhaps, more expensive than another site would be, though that was an advantage in other respects. The access to the houses was very peculiarly made. Government had tried something of a similar plan at Athlone in the new barrack buildings there, making a sort of gallery outside with strong flags, and in that way giving access to two or three floors. This obviated the great objection of the Edinburgh flat system—that of having the common stairs, which it was nobody's business to keep clean. He thought it a waste of money to build one-storey houses, for the really expensive and perishable thing was the roof, and they had a right to try to get as much as they could under it.

Dr. Grimshaw congratulated the directors on having made so promising a beginning. He hoped it would not be taken as unfriendly if he said that, as to plans for the Buckingham-street site, he was glad to hear they were not all settled, for there were two faults in them, from a sanitary point of view, of a rather serious character. The first was, the recesses in front of the houses, which would diminish very considerably the light and air of the windows; and though he was not competent to give an opinion in an architectural point of view, he believed that every projection in a house was also to a certain extent a loss of money. There were other defective sanitary arrangements. He advised the directors to look into the plans carefully to see whether they answered all requirements of health.

The re-appointment of directors and auditors was then proceeded with, and the meeting adjourned.

We understand the company has also accepted a tender by Mr. George Tyrrell for a block in Upper Dominick-street, at the rate of £108 6s. 8d. per tenement—total £2,383 6s. 8d.

A REPRESENTATIVE WORKING MAN.—The remains of George Odger, an English working man, who was for the last quarter of a century, or upwards, connected with trade movements, were interred in Brompton Cemetery on Saturday evening last, a great funeral demonstration having signalled the event. George Odger was widely respected by a large circle of friends, rich and poor, even outside the circle of trade organisations, and he had always borne the appellation of being an earnest and honest representative working man.

#### BOOKS RECEIVED.

*The Aryan Origin of the Gaelic Race and Language; The Round Towers; The Brehon Laws; Truth of the Pentateuch.* By the Very Rev. U. J. Burke, M.R.I.A., President of St. Jarlath's College, Tuam. Second Edition, pp. 530. London: Longmans and Co. 1876.

OWING to the numerous demands upon our time since the receipt of the above work, and being conscious that more than a cursory glance at its contents is desiderated, we are unwillingly compelled to hold over our review of it for the present.

*The Journal of the Royal Historical and Archaeological Society of Ireland.* Part for October, 1876. Dublin: University Press.

IN the part now before us we have the continuation of "A Memoir of Gabriel Beranger and his Labours in the Cause of Irish Art, Literature and Antiquities," which was commenced in vol. 2 of the journal, by Sir William Wilde. It is here continued, with an introduction by Lady Wilde, and contains many interesting particulars. We cannot at present do more than print the words of her ladyship in which she winds up the "Memoir" of an artist written by her deeply-lamented husband, and which was to him a "labour of love":—

"The great solemn Past has its claims upon our artists; the lonely island church, where a saint has prayed—the grim ruins of the castles of the Pale—our beautiful and desolated abbeys—here are subjects for the artist's hand, illustrative of the faith, the suffering, and the struggles against oppression, that have made up the history of Ireland for the last thousand years. It was the earnest wish of Sir William Wilde that Beranger's sketches, so rich in suggestions for our living artists, and so important to the antiquary and archaeologist, should be published in a volume along with the Journal. Probably more than two hundred of these interesting works of art may be still forthcoming. He would have undertaken the work himself, even at his own expense, had health and life been spared to him. But it was to be hoped that the project will not fall to the ground, and that the publication of so useful and valuable a book will be accomplished by some one with an intellect as energetic, a mind as well stored with the requisite knowledge, a heart as zealous for the advancement of Irish art and literature, as were the intellect, the mind, and the heart of Sir William Wilde."

#### THE PRESERVATION OF A "NATIONAL MONUMENT."

IT is reported that a number of gentlemen recently visited the late Mr. J. H. Foley's studio, for the purpose of inspecting the state of the monument to "The Liberator," proposed to be placed in Sackville-street some day or other. "They went," says a morning journal, "and saw the 'monument,' which was still in a good state of preservation—quite as good as it ever was; but it kept Mr. Brock, the talented assistant of Mr. Teniswood, continually occupied in repairing slight dilapidations, which if allowed to remain unrepaired, would lead eventually to the loss of the model. Something, however, must be done at once; for, although the monument was not now deteriorated, it could not be expected to remain good for a very great length of time, so that if they wanted to get it they must do so quickly." There has been a precious muddle over this "O'Connell Monument."

#### NOTES OF WORKS.

For the Midland Great Western Railway Company, Mr. George Tyrrell is erecting artisan's dwellings at Navan, from plans by the company's engineer, Mr. James Price.

The same builder has in hands sundry alterations at Richview, Monkstown, the residence of Mrs. O'Connor, Frenchpark, Roscommon. Mr. T. N. Deane is the architect.

The plans of Mr. A. G. Jones have been accepted by the Building Committee for the Educational Institute, St. Stephen's-green, for the Methodist Body.



## ADVERSARIA HIBERNICA.

## LITERARY AND TECHNICAL.

IN these days of encaustic tiles and tessellated pavements, of revived Queen Anne styles in brickwork and furniture, of fancy veneers and enamels, of marquetry and parquetry, and other house decorations, it is worth enquiry whether the "mere Irish" ever indulged in any of the above systems of ornamentation. We showed in one of our last notes that specimens of plaster and stucco work were executed in the mansions of Dublin in the middle of the last century, as artistic and excellent as was ever performed elsewhere at the same period, and not equalled, or certainly not surpassed by any one since that period.

Parquetry, or inlaid flooring, we find was also executed in noblemen's mansions in the city and provinces early in the last century, but how much earlier we are not prepared to say. Tyrone House, sometimes called Waterford House, Marlborough-street, now for many years occupied by the Board of National Education, was erected about the year 1740, and designed by Richard Castles, the architect of Leinster House, the Lying-in Hospital, and other public and private buildings. In a description of this house, published in Poole and Cash's "Views of Dublin," ninety-seven years ago, we are told that "the oak perkenent [parquetry] floors in the hall storey are curious, being laid out in diamonds from 18 to 20 in. square." We may add here, that during the early part of this century Tyrone House was one of the sights of this city for visitors, as far as the workmanship of its interior was concerned. The hall is richly decorated with stucco work, and the parlours roomy and spacious. There is, or was, a profusion of mahogany carved work in this mansion, the stairs, balusters, handrails, and doors being all of mahogany. The staircase wall was ornamented in a superior style of stucco work. The busts of the various members of the Waterford family which rested on consoles placed against the walls, were designed by Cremillion, assisted in the execution by the Francini Brothers, the former and the two latter being the same artists who executed the beautiful stucco work in the Rotundo Chapel, alluded to in our former notes. While in the possession of the Waterford family the apartments of Tyrone House contained a fine collection of works of the old masters, and beautiful specimens of mosaic work. In one of the apartments, the ceiling of which was richly carved and ornamented, the walls were hung with tapestry, the work of the younger Taniers, executed in Holland.

Powerscourt House, South William-street, which was built from the design of Robert Mack, a native architect, is not excelled by any nobleman's mansion in the city for goodness of design, workmanship, and materials. The hall and staircase of this mansion are decorated with rich and heavy stucco work in the taste of the last century. While it was the residence of Lord Powerscourt there were many objects of art within its walls worth seeing, and a good collection of paintings by the old masters; but these were all removed to the owner's residence in Wicklow after the house was purchased for the Stamp Office in 1811. This fine mansion, which was commenced in 1771, was finished in three years, costing the moderate sum of £10,000. The mountain granite of the front was raised on the Powerscourt estate in Wicklow, the ornaments and dressings are of Portland stone. The Commissioners of Stamp Duties paid his lordship for this house £15,000, and for the past fifty years or upwards it is known as the commercial establishment of Ferrier, Pollock, and Co.

There are some other old and noble mansions in this city whose interiors, as they were to be seen in the early part of this century, were worth seeing, for the many objects of art they contained; among them Leinster House (now the Dublin Society House), and Charlemont House, Palace-row, Rutland-

square. Aldborough House (now barracks), notwithstanding its site, was a fine mansion when first erected, but its interior has undergone several alterations, firstly when it was converted into a scholastic establishment, known as the Feinaglan Institute, and lastly when utilised for its present purpose.

Here are some items of news from a Dublin magazine for September 1793, *re* the new St. George's Church, which was not erected for nearly ten years subsequently. "The Hon. and Rev. Mr. Agar, younger brother of Lord Viscount Clifden, who has recently been appointed rector of the new parish of St. George, on the north side of the river, created by an act of the last session of Parliament, has lately read his assent and consent in St. Thomas's Church. This was necessarily done there, as no parish church is yet erected in this lately imparished district; and it is very uncertain when one will be built there, it depending on the voluntary contributions of the inhabitants. The valuation, however, of the several houses in its circuit, for the ascertainment of the minister's money, has been made, a commission having been issued from his Excellency the Lord Lieutenant and Council for that purpose." St. George's Church was erected in 1802, and no one was a more generous contributor than its architect, Francis Johnston, who supplemented his first contribution by a fine peal of bells in 1828, the year of his death, at the cost of £1,300. The cost of the church, we believe, was estimated at £90,000. Three or four years ago a printed document was issued by the churchwardens, with the approbation of the rector and curates, for the purpose of providing funds and making arrangements for the ringing of the bells of St. George's, on a number of stated occasions throughout the year. What success attended the appeal we have not heard. It was stated that although the architect provided a peal, there was no funds devised for meeting the expense of their ringing. Surely in memory of the munificent gifts of the distinguished architect, it is the duty of the parish to provide the requisite expenses of ringing the peal on every fitting occasion.

In looking over some old wills lately of the Roman Catholic peers of Ireland, we came upon one of an interesting character, and we shall reproduce it, as it affords interesting illustrations of social manners in this country in the early part of the seventeenth century.

Jenico Preston, the fifth Viscount Gormanston, made a will on the 2nd of November, 1629. He directs his body to be buried in the Chapel of Godmanston, the place of his parish, at Strathmullen. He leaves to his daughters Besse and Jane £200 a-piece, and £300 more to be given them with speed to purchase a place to build a house for them, "whereby they shall cause daily prayers to be said for my soul, and some masses, and for default thereof, to return to my heirs males and house for ever. I leave my crimson cloak to my said daughters to make some church stuff, to be kept to themselves for their use, whereupon they shall put my arms and their names. I leave to my daughter Cate £100, and that my Lord Howth, my son and heir, my brother Thomas St. Laurence, shall add unto the same what they think fit, so to exceed not £1,000 if she do marry with their consents, to be paid out of my son, his preferment." To each of his daughters £100, to be increased to £700, and not more, as aforesaid, but if any of them take a religious life, each to have £200 besides their entrance, "of which £50 bequested to each of them, I leave as a legacy with the house they or either of them shall enter into to pray for me." He bequested to each of his sons, Robert and Thomas, £500, 40s. to be given to Mr. Delane for certain uses; he paid none unto him; to the Franciscan friars £100 to say masses for his soul. Several other legacies for the same purpose. To Robert Preston, his brother, £10 a-year for life, and to be in the house, and to have the same command as he then had, and all his

apparel; and my "Lord Howth, Munkeye, and Boniface, and my brother Thomas St. Laurence, a young grey gelding or fielt, as his choico;" to his cousin Bartholomew Dillon, his grey horse, with his best furniture; to his sister Elenor £5 yearly during life; to the Earl of Westmeath, Lord and Lady Howth, his brothers Thomas and Edward St. Laurence, Lord Netterville, Sir Thomas Fitzwilliam, Sir Christopher Plunket, his sister Dogherty, his brother Rochfort, the Lady Taaffo, his brother Darcy, his aunt Mable, Michael Taylor, and Richard Caddle of Harberston, to each a ring worth 40s., with the motto "Remember Gormanston;" to his son Robert, for his maintenance, £16 a year during his abode at study in Tredag [Drogheda], or such like place, and if he go to the Inns of Court, the said sum to be made £40 sterling, with other legacies. "And I will that four or five pictures be drawn on canvas or otherwise, as near as they can to my stature, one whereof to remain in this chapel, the rest to be placed in chapels of the Friars Preachers, with these words under, them 'Pray for Gormanston.' To his son Nicholas 12 cows, whensoever he desires to take any ground, and leaves him his little basin and ewer, two cups, and a salt of silver; to his wife all the rest of the goods, corn, cattle, plate, and furniture, she to keep all his children together, and to leave his house furnished with hangings and other the most necessary implements as it was then, when he shall die; and the one half of the plate, and left to herself all her jewels, and what other money she had. He wills that no black, nor any other solemnity be used at his funeral, only meat and drink to be bestowed by his wife, and £20 to be given to the priests, and to each of the poor 5s.; leaves that the Chapel of Strathmullen be repaired and builded; leaves all the lordship of Gormanston to his wife for her jointure, and appoints her sole executrix; willing that she cut no timber but a tree or two on necessary occasions, in the Strathmullen or the Balloes, and that she leave all the state houses stiff, staunch, and tenantable; and that she keep all his children until they be preferred; only leaves his estate to go according to the entail specified in a feoffment, and to his heir Nicholas all his pieces, pistols, and Scottish saddle."

The above in many particulars was a very sensible will, and we trust that it was carried out in respect to repairs and building, funeral ceremonies, the cutting down of timber, and the keeping of the houses "stiff, staunch, and tenantable." In the last particular it were to be wished that many of his lordship's contemporaries and successors in the peerage imitated his example, and that the houses on their estates were kept in a sound and habitable condition.

## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

WE have already given some short details of the birth and parentage of Miss Woffington, and, later on, some account of her acting in different characters in her native city. Between her leaving and her return she had rapidly advanced in her profession while on the London stage, and was as much a favourite with the public in the sister kingdom as in her own country. With a Dublin audience, however, she always felt completely at home; and, notwithstanding a defect in voice, the brilliancy of her acting and her personal charms carried all before them. She was many-sided, and, as a consequence, was possessed of great versatility, as may be seen from the list of characters she personated.

We find her next, in her new engagement under Sheridan at Smock-alley, performing Phyllis in the "Conscious Lovers," the manager acting the part of Young Bevil; Digges, Myrtle; King, Tom; Cibber, Cimberton; and Miss Davies, Indiana. She afterwards performed Constance, King John,

\* See ante.



Cleopatra, All for Love, Lady Betty, Modish, Estifania, Rosalind, Zara, Mourning Bride, and Lothario in the "Fair Penitent." In each and all of these characters Miss Woffington gave thorough satisfaction. The parts in which she mostly charmed her audience, we are told, were—Charlotte in Cibber's "Nonguror"; Lady Townly, Hermione, and Sir Harry Wildair. These characters were very opposite, yet she succeeded in pleasing all, and repeated each of them ten nights, the receipts of the theatre from these last representations accruing to upwards of £4,000—a very large sum for the Dublin of that day. On each night there was an average of £100—an instance, says Hitchcock, never known at that time, or up to his time, on the Irish Stage, for four old stock plays, as these pieces were then called. Her engagement doubtless proved a profitable one to Sheridan, and during the ensuing winter the company continued nearly intact. The manager was not forgetful to whom he owed such unexampled success, so he gladly doubled Miss Woffington's engagement, making it £800 for the winter. As her attraction continued unabated, Sheridan reaped a rich harvest.

Speaking of this period, Hitchcock writes: "To her honour be it remembered that whilst in the zenith of her glory, courted and caressed by all ranks and degrees, it made no alteration in her behaviour: she remained the same gay, affable, obliging, good-natured Woffington to every one around her. She had none of those occasional illnesses which I have sometimes seen assumed by capital performers, to the great vexation and loss of the manager and disappointment of the public: she always acted four times each week. Not the lowest performer in the theatre did she refuse playing for; out of twenty-six benefits, she acted in twenty-four, and one of the other two was for Mrs. Lee, who chose to treat the town with an exhibition of her own Juliet. Such traits of character must endear the memory of Miss Woffington to every lover of the drama."

The following bill of Smock-alley, February 11th, 1752, when "Love for Love" was played, will show how well comedies were supported at that season in Dublin:—Valentine, Sheridan; Scandal, Digges; Tattle, Cibber; Jeremy, King; Sir Sampson Legend, Sparks; Ben, Stevens; Foresight, Mynitt; Angelica, Mrs. Bland; Miss Prue, Miss Cole; Mrs. Foresight, Mrs. Lee; Nurse, Mrs. Mynitt; and Mrs. Frail, Miss Woffington.

Here is one verse from among several others in different styles written in the papers of the day in praise of the charming Peg:—

"Hail then! in whom united we behold  
Whatever graced the theatres of old;  
A form above description, and a mind  
By judgment tempered, and by wit refined.  
Cut off in beauty's prime! when Oldfield died,  
The Muses wept, and threw their harps aside;  
But now resume the lyre, amazed to see  
Her greatest beauties far out-done by thee."

The poem from which the above is an extract was, we are told, written by a gentleman of some eminence in the literary world. To be compared to Cæsar—who came, who saw, and conquered,—and to be apostrophised in scores of rhymes, was sufficient to have turned the head of a woman born in the higher ranks of society; but with the sensible, handsome, and good-natured Peg it had only the effect of making her the more obliging, graceful, and kind-hearted. Nearly all who have written of the Stage, and of actors and actresses, speak in high terms of Miss Woffington.

Arthur Murphy, her own countryman, thus speaks of her:—"Forgive her one female error, and it might be fairly said 'that she was adorned with every virtue; honour, truth, benevolence, and charity were her distinguishing qualities.' Her conversation was in a style always pleasing and often instructive."

Boaden writes:—"When Woffington took up the part of Harry Wildair, she did what she was not aware of—namely, that the audience permitted the actress to *purify* the character, and enjoyed the language from a

woman which might have disgusted from a man speaking before women—as I have heard spoiled children commended for what would, a few years after, shut them out of the room if they ventured so far. No, Miss Woffington, in spite of Quin's joke upon your supposing that 'half the house took you for a man,' I am convinced that no creature there supposed it for a moment; it was the *travesty* seen throughout that really constituted the charm of your performance, and rendered it not only gay but innocent."

Dibdin says:—"Mrs. Woffington was an actress of a most extraordinary kind, and in some parts must have been unrivalled. She had a bad voice, but this seems to have been the only impediment to her becoming superlatively excellent; for though it is universally allowed to have prevented her from interesting the passions in so eminent a degree as either Mrs. Pritchard or Mrs. Cibber, yet her superior beauty and grace, the industry with which she cultivated her profession by observing the instructions of Cibber, getting introduced to Mademoiselle Dumesnil, the attention she paid to Garrick, and every other eligible opportunity to improve, which she seized with solicitude and avidity, established for her a solid and firm reputation. She is said, in Cleopatra, Jane Shore, and Calista, and all other parts which require a form of commanding and majestic beauty, to have interested her auditors to a degree of astonishment. She also greatly excelled in comic characters, but I cannot think it an addition to her fame, or to female delicacy, that the most prominent of these characters was Sir Harry Wildair."

Davies writes at some length of Miss Woffington. In the course of his portraiture he remarks:—"Her chief merit in acting, I think, consisted in the representation of females of high rank and of dignified elegance, whose graces in deportment as well as foibles she understood and displayed in a very lively and pleasing manner. . . . But this actress did not confine herself to parts of superior elegance; she lived to wanton with ignorance when combined with absurdity, and to play with petulance and folly, with peevishness and vulgarity. Those who remember her Lady Pliant in Congreve's 'Double Dealer' will recollect with pleasure her whimsical discovery of passion and her awkwardly-assumed prudery. In Mrs. Day in 'The Committee' she made no scruple to disguise her beautiful countenance by drawing on it the lines of deformity and the wrinkles of old age, and to put in the tawdry habiliments and vulgar manners of an old hypocritical city vixen."

Donaldson, in his "Recollections," observes:—"Since Margaret Woffington's day, now 104 years, there has never been a comic actress capable of sustaining such a character as Lady Macbeth before a London audience. This, the most difficult of all Shakespearian parts, was considered by the critics a first-rate performance; and in regard to her genius for comedy, Garrick, who was so popular in Harry Wildair, gave up the part when Woffington appeared in it. This extraordinary Irish actress was also celebrated for her acting of Queen Katherine, Henry III., and Constance in 'King John.'"

Chetwood, in his "History of the Stage," notices that "this agreeable actress, in the part of Sir Harry, coming into the green-room, said pleasantly, 'In my conscience, I believe half the men in the house take me for one of their own sex.' Another actress replied—'It may be so; but in my conscience the other half can convince them to the contrary.'"

Walpole, writing in 1741, had not much praise for the then young actress, who afterwards achieved such fame:—"There is much in vogue a Mrs. Woffington, a bad actress; but she has life."

Victor's portrait is not a very flattering one either:—"She possessed captivating charms as a genial, witty, bottle companion, but few remaining as a mere female."

Leigh Hunt says:—"Mrs. Woffington was an actress of all work, but of greater talents

than the phrase generally implies. Davies says she was the handsomest woman that ever appeared on the stage, and Garrick was at one time in doubt whether he should not marry her. . . . She was famous for performing in male attire. . . . She was the only woman admitted into one of the Beef-steak Clubs, and is said to have been president of it."

Garrick addressed her, we believe, in some lines, one verse of which we remember, though it is upwards of thirty years since we read them in some old magazine. We quote liable to correction:—

"Once more I'll tune my vocal shell,  
To hills and dales my passion tell,  
The love that time alone can quell,  
That burns for you, my Peggy!"

Campbell, in his "Life of Siddons," speaks of Mrs. Woffington, though pleasing to the eye, had a habit of barking out in the "Fair Penitent" "with dissonant notes."

A recent writer, Mr. Percy Fitzgerald, in his "Life of Garrick," points out that "from her portraits we can see that this notorious lady was not a bold, rosy-cheeked hoyden, as we might expect, but an almost demure, placid, and pensive cast of face. She wore her hair without powder, and turned back behind the ear, nearly always with a cap carelessly thrown back, or a little flat garden hat set negligently on, *a la* Nelly O'Brien. Certainly a deeply interesting face, but with a little hint of foolishness and an air of lightness in all its calm, pale placidity."

Hooile, the translator of Tasso's "Jerusalem Delivered," thus sings of our own Woffington, who, with all her failings—few or many,—we hope may be forgiven:—

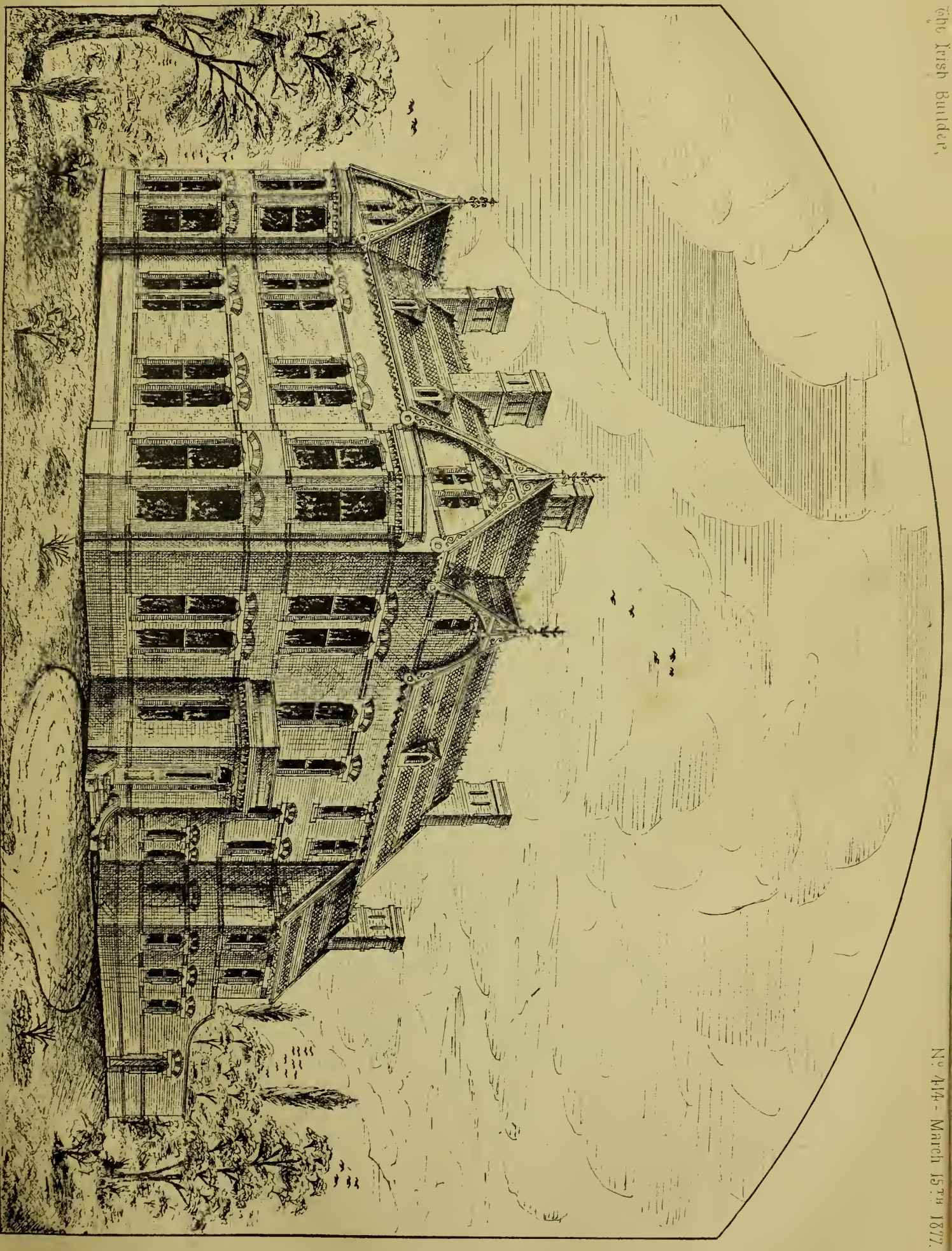
"In every sense of comic humour known,  
In sprightly sallies wit was all thy own.  
Whether you seemed the city's most humble wife,  
Or shone in Townly's higher sphere of life,  
Alike thy spirit knew each turn of wit,  
And gave new force to all the poet writ.  
Nor was thy worth to public scenes confined;  
Thou knewest the noblest feelings of the mind;  
Thy ears were ever open to distress,  
Thy ready hand was ever stretched to bless."

The following notice of Miss Woffington, from John O'Keefe's "Recollections," has a peculiar interest for a large number of our countrymen:—"In 1755 the celebrated Mrs. Woffington acted in the first play I ever saw—Alicia in 'Jane Shore.' I remember some years after seeing her mother, whom she comfortably supported—a respectable-looking old lady in her short black velvet cloak, with deep fringe, a diamond ring, and a small agate snuff-box. She had nothing to do but going the rounds of the Catholic chapels, and chatting with her neighbours. Mrs. Woffington, the actress, built and endowed a number of alms-houses at Teddington, Middlesex; and there they are to this day. She is buried in the church, her name on the tombstone."

The above words of O'Keefe are very suggestive, and bring us back to the days when the "respectable-looking old lady" whom a daughter's love provided for in her old age, once sat a poor but honest fruit-seller at her stall at the entrance of Fownes's-court in this city. The tiny "Polly" of Madame Violante's booth of 1727 or thereabouts, or her struggling mother, never dreamed of such an ending to such a lowly beginning!

The alms-houses founded by the generosity of Mrs. Woffington are indeed in Teddington, but, as we before remarked in our notes, a mystery hangs over them, and it is doubted whether those now known as the Woffington Alms-houses are the original ones. The writer has recently visited Teddington, and was pointed out certain houses near the church, which are said to be the original buildings. The alms-houses are a row of five or six old and rather dilapidated cottages, or rather cabins, with little narrow patches of gardens in rear. One of these cottages was tenantless for some months previous to our visit, and the local authorities were not in any haste in troubling themselves as to whether it was occupied or not, or the intentions of the donor carried out. Except living rent free, the tenants of these alms-houses receive but little else indeed





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throughout the year; some are very old people, and they have apparently to work as long as they are able, and shift as best they can for themselves. If any ask for more help, they are told that there is no money. Churchmen and churchwardens can afford the inquirer no information, but we think the time has long since arrived when a little more ought to be known about the history of the Woffington charity. Whatever fund or property was originally devised, if properly managed, should by this time have greatly increased in value. Many trusts have been made away with during the last hundred years; but as we are not in a position to afford historical information of local matters in Teddington, we trust that those who live there, and have long memories and clear consciences, will. Some representative institution of the dramatic profession in London should take steps for ascertaining the true particulars of the present and past management of the charity founded by a brilliant member of their own profession, the frail and fascinating but truly benevolent Margaret Woffington.

#### TREATMENT OF IRON FOR THE PREVENTION OF CORROSION.\*

WHILE experimenting, two or three years ago, with my friend, Mr. Hugh Smith, on different methods for preventing incrustation and corroding of steam-boilers, I was led, through the failure of all the processes employed, to believe that, if it were possible to convert the surface of iron plates into the magnetic, or black oxide of iron, in such a manner that the particles of black oxide formed in the position of the original particles of iron could be rendered perfectly adherent to the iron surface, which does not become per-oxidised, and perfectly coherent with one another, the object would be effected. I do not intend to enter into the chemistry of the oxidation of iron to its full extent; it would take too much time, and it would rather tend to confuse than to enlighten those who are not well up in their chemistry, and would raise questions which would bring on prematurely a collision with the views of some of my brother chemists, which collision, under suitable circumstances, at some future time, not very remote, I look forward to with considerable satisfaction, as it will be the means of solving many phenomena which have never yet been explained. A piece of dry iron, its surface being polished, may be exposed for any length of time to dry air without rusting, but it begins to rust at once as soon as the slightest moisture comes in contact with it. We have to consider only two oxides of iron: one containing 56 parts by weight of the metal to 16 parts of oxygen, and the other containing twice 56 parts of iron and three times 16 parts by weight of oxygen. We speak of these oxides as the protoxide and sesquioxide, or as ferrous and ferric oxide.

Immediately the protoxide is formed, it being more moist, it unites with oxygen and becomes gradually converted into the ferric oxide. Now, let us suppose a moist iron plate to come into contact with oxygen. It is clear that the protoxide will be first formed, and this rapidly becomes converted into the higher oxide. Now, suppose you take a solution of the salt of the higher oxide and put into it metallic iron, in time, the air being excluded, this higher salt will become converted into a salt of the lower oxide. Let us now see how this bears upon the rapid oxidation of iron in the presence of moisture. We have seen that when oxygen comes in contact with moisture the first oxide is formed and becomes rapidly oxidised into the higher one. But this higher oxide is in contact with metallic iron, which will reduce it to the lower oxide, thus becoming oxidised by the oxygen which it has taken up from the higher oxide. You

will now see clearly how it is that iron rusts throughout its whole substance with such rapidity, for the oxide of iron serves as a carrier for atmospheric oxygen to the iron to almost any depth. There is another oxide of iron called the black or magnetic oxide, containing three times 56 parts by weight of iron, and four times 16 parts by weight of oxygen. Some chemists consider this oxide to be a sort of mixture of the two others, and they call it ferroso-ferric oxide; whether this be the case or not does not matter to us this evening. But it is a most important point for our consideration, that this oxide undergoes no change whatever in the presence of moisture and atmospheric oxygen. Nor does any temperature to which it can be exposed, in any of the ordinary uses to which iron is applied in the presence of moisture, either decompose it or produce its further oxidation. In every school where chemistry is taught, in the most elementary lecture on hydrogen, the pupils are told that if they pass steam over red-hot iron filings contained in an iron tube, they will be able to collect and burn hydrogen gas at the opposite end of the tube to where the steam enters. For a long time it was thought that the particles of black oxide formed by this decomposition of the steam were pulverulent, and could not be made to cohere into a solid mass. The result of a considerable number of experiments has been to prove that they can be made not only coherent amongst themselves but adherent to the body, and that both these produce a proper formation of this black oxide on the surface of iron plates; for, as I will show you later on, the oxidised surface of the iron resists for a long time, and more effectually, the rubbing with emery paper, than does the simple metallic iron itself, and that there is a very manifest difference between the case with which a sharp rasp is able to cut away the surface of the iron, and the difficulty with which this black oxide is removed from the surface by that same instrument. The method which long experience has taught us is the best for carrying out this process for the protection of iron articles in common use, is to raise the temperature of those articles, in a suitable chamber, say to 500° F., and then pass the steam from a suitable generator into this chamber, keeping these articles for five, six, or seven hours, as the case may be, at that temperature in an atmosphere of superheated steam. I will presently call your attention to the diagram of the furnace and muffle which I have employed in all our later experiments, and in which all the specimens before you, which will be alluded to in this paper, were prepared. Differences of temperature are employed where different objects are to be obtained. If it be wished to act upon surfaces of polished iron or steel, it is desirable to let the temperature remain at 500° F., until the operation is completed. Articles coated in this way will not resist the action of continued moisture such as has prevailed for the last two months, when exposed out of doors; but they will resist the action of any amount of moisture with which they may come in contact in a house or building; and the reason of this will be very obvious, because only a thin film of the iron on its surface is transformed into the black oxide. This I will explain more fully to you, when I call your attention to individual specimens. At a temperature of 1,200° F., and under an exposure to superheated steam for six or seven hours, the iron surface becomes so changed that it will stand the action of water for any length of time, even if that water be impregnated with the acid fumes of the laboratory. Before calling your attention to our failures and successes as they lie before you on the table, I will just allude to a few of the uses to which this process may be, as I consider, successfully applied—to water-mains, also to water-connecting pipes, as well as to the water-pipes used inside the house, which, in this case, would supplant their leaden predecessors. In this hall of hygiene, these words will, doubtless,

sound as sweet music to the ears of many of those who have honoured me with their attendance this evening. The greatest objection to the use of iron pipes for the supply of water in houses hitherto has been this, that by rusting they caused the first quantities of water drawn off in the morning to be dirty and turbid; now this will be entirely prevented, if the pipes be first exposed to the treatment which I have just explained to you—of course gas-pipes could with advantage be similarly acted upon—and as the surface, when oxidised, is harder than the natural surface of the iron, the friction of large bodies of water through the pipes, and the friction necessarily employed in fixing them in their places, would be much better resisted than by the untreated iron itself. I cannot over-estimate the advantages which the employment of this process must confer on architects, who will be by it enabled to employ iron, whether wrought or cast, much more largely, not only in the decoration, but in the construction of their buildings. Last summer, I was at a very large house in the country, where the entrance portico, some 20 feet high, was being painted and decorated, when one of the large plaster ornaments of the ceiling broke away from its holdings, and would have fallen to the ground except that it was caught by a workman. This ornament weighed not less than 25 lb., and if it had fallen from this height upon the workmen below, it must have killed them. The ornament had been there many years, and was fixed up in the best method possible, it being supported and secured by iron rods. On examination I found that these rods were rusted through completely to the very centre. I need not make any comment upon this, since I have been able to introduce you to iron treated in such a way that it will never rust. Of course if the process will answer for architectural ornaments, it will answer for statues, so that iron may be used instead of bronze, which will materially lessen the cost of casting statues, both in the material and in the expense of making the moulds. You well know that when a tinned saucepan is allowed to get dry on the fire and burns, as the servant calls it, that it is rendered useless until it is tinned again. Now, if such a saucepan be treated by the method I recommend it may be allowed to get red-hot without suffering injury, for the protection on its surface is produced at a red heat. We have experimented on some screws, hinges, locks, keys, bolts, with complete success. It has been suggested to me that the iron nipples used in gas-lights would not corrode, and would, therefore, be more useful, if submitted to this action of superheated steam. Wherever iron is used, railings, street gas-posts, iron safes for keeping documents fire-proof and thief-proof, the framework of filters, tanks, cisterns for domestic and other uses, iron employed in the erection of temporary buildings—which, I flatter myself, if treated by this process, would become permanent buildings—all these, and many other applications of iron to the arts, would immensely gain by being submitted to this oxidising action. I think I need hardly take up your time by enumerating other applications for the preservation of iron, for it appears to me that they would be commensurate with most of the uses to which iron is applied, save and except those where friction—such as that to which rails and iron wheels are exposed—would necessarily wear away the coating, as they wear away the material itself. I am happy to see a namesake of mine here present this evening, who will tell you that he is carrying out a process for the manufacture of peat into charcoal by the action of superheated steam, and that he is enabled, by superheated steam alone, to raise the temperature of his chambers to a red heat, quite sufficient to effect his carbonising process. I will now call your attention to the specimens here before you, and to a description of the furnace which we employ, and I shall be most happy to explain, on being questioned, any parts of my process which may appear to be obscure, and to answer, if I can, any ob-

\* By Professor Barff, M.A. Read at meeting of Society of Arts, February 14th, 1877. See p. 70, ante.



jections which you, gentlemen, in the interests of science, will feel it your duty to bring against it.

#### DISCUSSION.

The Chairman said that two such important matters had seldom been brought forward at the same time; and he would invite gentlemen to treat them separately. They all knew the evils resulting from lead paints, but they did not all know the difficulties which attended the use of zinc. Twenty years ago, a house was painted with zinc white under his direction, which did not succeed, but he hoped the present efforts would be more successful. With regard to the oxidation of iron, it was too grand a thing to be achieved without many difficulties, and they must not suppose that the question could be solved by three or six months' experience. Iron buildings were always getting weaker and going to decay, and any invention which would prevent that, and render iron available for construction in the way they hope to see it, would be of such immense importance, that it might well become the subject of a long series of careful experiments. They must ask what would be the effect in 100 or 200 years by this process before they were satisfied they had achieved all that was required; but even if it preserved iron for a much shorter period it would be a very great advantage.

Mr. George Howe said he had used this pigment as a decorator very successfully, and if others would only take it up they would find its covering properties were quite equal, if not superior, to most white leads. It was well known in the trade that a painted ceiling done with white lead would very soon come to grief, and a few months ago he had painted a ceiling with that material a delicate grey, but it was now of a light brown colour. Six or eight months ago, however, he had painted a ceiling with this new pigment, and, although it had several Argand burners under it, it was still as white as when first done.

Mr. Laing said he should be very much rejoiced to see something which would replace white lead. He had tried years ago to introduce oxide of zinc, but it would not do, because the oil would not mix with it, and when it was cleaned the zinc washed off by pailfuls. The oil and lead mingled, and if the lead was varnished it would last for many years; but it was very pernicious, both in the manufacture and use. At the present moment an effort was being made by some of the manufacturers to do away with the noxious effects in the manufacture, and he was experimenting on some which had been produced by the new process. He only feared that this new pigment might have the same properties as the older zinc whites, which were not stable; for, if the pictures round the walls had been painted with that material, when they received such a scrubbing as they had many years ago, there would not be much left of them.

Mr. Williams said one of the greatest difficulties met with at first was that the sulphide of zinc would not commingle with the oil, and worked badly under the brush, and that led to the introduction of magnesia. This united with the oil and formed a kind of soap, just in the same way as the lead did, but it did not produce semi-transparency, as was the case with lead soap. This magnesian soap gave the peculiar property of softness to the pigment. It occupied about twice the volume, and had the same covering power as lead, so that it might be reckoned at about half the price. One point of great importance was its good drying qualities. He at first took it for granted that it would not dry well, but when it was well washed—and this was an important point in the manufacture—so as to remove all the chloride of sodium and other impurities, it was by no means a bad dryer. He had proof of that a few days ago, in preparing the specimens for the lecture, for when he suggested to the workman the use of sulphate of zinc or borate of zinc as a dryer, he said it was not necessary, as it would dry quicker than the lead, which proved to be the case. Another point was that, as far as he had yet experimented, it had no effect on other colours; it might be that it would not work with arsenical greens, but he thought they might well do without them both for decorative and artistic work. Prof. Barff had suggested that it might not stand with Prussian blue, but he had a specimen with him which had been painted some time and had not changed colour, so far as his eye could tell.

Mr. Laing asked if it would not be necessary to add any dryers?

Mr. Williams said decidedly dryers should be added. At the present time they were experimenting to find a dryer which would not injure either the body or the colour of the pigment, and would make it dry quickly. They had met with some little success, but he was not at liberty just at present to point out what the result was.

Mr. Tozer said he had been out of the decorative trade for some years, and now represented a large house in the colour trade; and if any new white were brought out it was pretty sure to be brought to them. Having been apprentice, journeyman, and master, he took a great interest in all these matters, and his idea of a good white was one which would cover black best. He had always attributed the great blistering of paint work to the use of white lead, and he had found that a front door grained in the ordinary way would not blister on the zinc paint, though it would on white lead. It would be always found that the blister brought you down to the priming, or second coat, and whatever was the outer it was generally primed with white lead. He had tried this new white, and found it did not blister. He also found that it "bore out" as well as covered; no man could grain until the work bore out, and you got a solid surface. Now this zinc paint bore out well, and you could grain as well on three coats as on four coats of white lead. He mentioned several instances in which it had been found to answer admirably for church decorative work.

Mr. Wills remarked that there were two aspects in which this pigment might be regarded; one as useful for domestic purposes, and the other for artistic use. The latter, he thought, was much the more important of the two, as they would only have, in that case, to take care that the paints should not be acted upon by any normal condition of the atmosphere. If this zinc paint was to be used in ordinary work, it must not be used over lead. This was a zinc sulphide, and he should fancy that on exposure to the air for some time it would become oxidised, which might be accompanied by a separation of free sulphur, and this would, no doubt, give a slightly yellow tint to the paint, such as was found when some of the zinc white was calcined. The sulphide of zinc would finally be converted into a carbonate or sulphate, and then, if any free sulphur were present, it would give rise to a yellowish tint. He should like to know if this had been tried for a sufficiently long time to show that decomposition did not take place. White lead was a carbonate, and, under normal conditions, was unalterable, because you could not consider the presence of sulphuretted hydrogen in the air as a natural phenomenon, and it could be prevented. A painting could be glazed, or could be placed in such a position that sulphuretted hydrogen could not have access to it, and under these circumstances the great objection to white lead would be removed.

Mr. Glasse said sulphide of zinc oxidised very readily and was converted into sulphate, leading to the separation of sulphate, which was soluble, and thus he feared this pigment would not be permanent, especially for outside work. This was the explanation of the oxide of zinc paint—which underwent a similar change—washing off so readily.

Mr. Harland asked how much magnesia was required in the preparation of the paint. It appeared to him that the magnesia had been taken as a base, combined with the fatty acids of the linseed oil, and the sulphide of zinc used as a kind of varnish, so as to be covered up by this soap. The same action took place with white lead. There was a chemical combination with the oil, and you covered up the carbonate of lead. Some chemists believed that there was also an affinity between carbonate of lead and the combination produced by the oxide or some salt of lead. It appeared to him that sulphide of baryta, or some other insoluble compound, which was not acted upon by sulphuretted hydrogen, would answer every purpose as well as sulphide of zinc, because there could be no chemical combination between this body and the oil.

Mr. Pearsall inquired if this new pigment had been tried in the simplest form, namely with water; either with or without the magnesia. He should be very sorry to throw any doubt on an excellent experiment, but he would remark that they did not know the history or composition of the oils which were used with it, and probably impurities in them might affect the result.

Dr. Le Neve Foster asked if the proportion of barytes used in connection with this new pigment was considerable, because if so, it would affect the mines producing that substance if it were introduced commercially.

Mr. Stinson spoke at some length on the impurities commonly present in boiled oils, and suggested that if a pure oil were used it might do away with the necessity for using magnesia.

[The remainder of discussion will appear in our next.]

**SCIENCE LECTURES FOR THE PEOPLE!**—In noticing the first of a course of lectures (intended for the working classes) now being delivered at the "Royal College of Science," St. Stephen's-green, a morning contemporary announces "the audience was large and fashionable!"

#### SHIFTING SANDS AT MOUTH OF WEXFORD HARBOUR.\*

ALTHOUGH it is unnecessary for the purpose of this paper, it would be interesting to know something about the ancient history of Wexford Harbour. Tradition says that there is a chart in existence which makes the principal ship channel to run north-eastwards and enter the sea at Curracloe, at the N.E. extremity of the north Intake; but the owner of this chart I could not find out. The oldest chart that I have seen is one by Valentine Gill, published in A.D. 1811. In this the bar is represented as a semicircle, extending between the Raven and Rosslare banks; it is, however, hard to imagine that this was correct. In A.D. 1844, a chart was made by Commander Fraser, R.N., of which No. 1 is a copy. On it the contour lines of the soundings have been marked with different colours, while inside the Eolian drift banks of the Raven and Rosslare the old extent of the lagoon is coloured yellow. In A.D. 1873, a new chart was made by Staff Commander Kerr, of which No. 2 is a copy while No. 3 is his plan of Wexford Harbour. The chart is coloured in contour lines, like the chart of 1844, whereby at a glance the changes that had taken place in the intervening twenty-nine years are evident. The present extent of the lagoon is coloured yellow. Previous, however, to pointing out these changes, it is necessary to call attention to the driftage of the littoral accumulation. Those who have studied the driftage on this coast must be aware that the main driftage in the South or Ballygeary Bay is north-westward from Greenore point to the Dogger bank, with the "flow" tide, a portion being drifted round the margin of the bay, and the rest carried with the deep water of the channel.† From the Dogger bank the driftage seems to be north-eastward to the Blackwater Bank, and from thence northward. In the North Bay the main driftage is also due to the "flow" tide, and is northward. The main driftages are in places modified by "counter-tides," which are generated by the "offing-tides" (called, also, "on-shore tides," or "half-tides"), striking a small head-land, and forming an in-shore current. They are called "counter-tides," as the current runs in a contrary direction to the "flow" or "ebb" of the tide, for from one to three hours before "full" or "slack" water. They are most continuous and effective during "spring tides." These counter-tides during "flow" drift the beaches along with them. Besides the modifications due to counter-tides, the main driftage on the beaches or in shallow water may be nearly or totally stopped, by continuous winds blowing in an opposite direction to the "flow" of the tide, and after such winds the beaches are fuller than at other times. After this digression, let us return to the charts of 1844 and 1873.

Prior to considerable portions of the north and south tidal mud land in the Wexford lagoon being intaken from the sea, the efflux out of that lagoon between the Raven and Rosslare points seems to have been nearly equal in strength to the "flow" of the tide in the South bay, and, consequently, the bank (Dogger bank) formed by the colliding of the two currents was a nearly east and west mass of sand, gravel, and shingle, the water coming into and going out of the harbour in three channels—viz., the "North channel," nearly due east of the mouth, the "Middle channel," through the S.W. portion of the Dogger bank, and the "Hanton channel," between the Dogger bank and the Rosslare Spit. The efflux from the harbour would also seem to have had an effect on the Lucifer bank, as will be hereafter mentioned.

The intaking of the north and south flats of the mud land necessarily reduced the influx and efflux of the harbour waters, and

\* By G. H. Kinahan, Esq. Read before Institution of Civil Engineers of Ireland on 7th Inst.

† The latter has been recently confirmed by T. Winder, M. Inst. C.E., who informs me that during a submarine survey, made last summer, he found a stream of pebble from Greenore going N.W. ward in the South channel towards the Dogger bank.



consequently the latter was not equal in strength to the "flow" tide in the south bay; therefore, the form of the Dogger bank gradually changed into a long, irregular N.E. and S.W. bank, which overlapped considerably the mouth of the harbour; and, when Kerr made his map in 1873, the "north channel" had been pushed considerably towards the north; the "middle channel" was not only obliterated, but a long narrow island of shingle had accumulated obliquely across its site; the "Hantoon channel" was so narrowed and silted up that only a small boat could pass through it, while the Lucifer bank was reduced both in size and height. Other features may also be observed to have changed, if the charts of '44 and '73 are compared, one being the margin of the three-fathom soundings in the South bay. The Æolian drift in the Rosslare Spit was also considerably denuded away, as marked on the plan of Wexford Harbour (Chart No. 4), this being, in a great measure, due to a counter-tide, which was generated by the new shape of the Dogger bank, and which flowed towards the S.W., impinging on the Rosslare bank and denuding it and breaking it; the largest gap cut being at the "Bull Perch."

The effects of the driftage, due to the "flow" of the tide, if left to itself would be to gradually extend the Dogger bank farther northward, but in the latter months of 1875, and the early months of 1876, the prevailing winds, that were nearly continuous, came from the N.E. and E. These, on the S.E. coast of Ireland, considerably affected the strands, forming "storm-beaches" and banking them up; while at the mouth of Wexford Harbour they stopped the northward driftage, and built up a semicircular foreshore off the Raven point, and so much silted up the "north channel" that it was nearly impassable for ships entering the port. This blockade continued for some time, but in February, 1876, the pent-up waters of the estuary forced an outward passage through the Dogger bank, seemingly on the site of the old "Middle channel." This new channel is marked on the copy of the plan of Wexford Harbour, Chart No. 5, from information for which I am indebted to T. Winder, Esq. On that same chart has also been marked the semicircular foreshore off the Raven point, as it was mapped on April 15th, 1876, but at this date the new "channel" was considerably more north-eastward than when mapped by Mr. Winder on March 7th. During the latter end of July and most of August, the winds were from the S.W. or south, and, on the 7th of September, a sketch-map was made, at about three-quarters ebb-tide, of the Raven foreshore and the Dogger bank, as represented on the copy of the plan of Wexford Harbour, Chart No. 6. From it will be seen that, after the change of wind, the form of the foreshore was altered, while the "new channel" advanced considerably to the northward.

From the observations made and the records on the different charts, it would appear that, under present circumstances, the passage into Wexford Harbour cannot be permanent, as the "flow" tide driftage tends to push the "North channel" northward, while continuous winds from the N., N.E., or E. at any time may stop this driftage and silt up the channel. But could not the driftage be so modified by artificial means that permanent channels might be formed?

In conclusion I would draw attention to the shifting sands at the mouth of Charleston Harbour. Fig. 6 is taken from a sketch-map by J. E. Hilgard, Assistant in the Coast Survey, Washington, D.C. Prior to the war of the Rebellion the entrance to the harbour of Charleston was somewhat similar to the old entrance into Wexford Harbour. To the southward, where 3 is marked on the map, there was a channel 9 ft. deep; and in the "Stone fleet," where 7 is marked on the map, there was the main channel 12 ft. deep. When the port was blockaded a Stone fleet was sunk in the main channel, the vessels being placed checkerwise in such a manner as to impede navigation, while inter-

fering least with the discharge of the water. Notwithstanding this, the tidal driftage from the southward formed a sand bank in the fleet, there being now only 7 ft. of water where marked on the map; but on each side of the "Stone fleet," channels, respectively 12 and 14 ft. deep, were cut, while the channel to the southward was also silted up, and is now only 3 ft. deep. Similarly with the entrance to Wexford Harbour, if a permanent structure like the "stone fleet" was placed on the bar, it would form a nucleus against which the current into and out of the harbour would act, thereby cutting out deep channels at both sides of it; and no matter what winds were most prevalent, these should be open, thus forming permanent channels into the harbour. The driftage from the southward also might more or less be stopped, and regulated by the judicious erection of groynes from the Rosslare bank and on the Dogger bank; and such works ought to be far less expensive than any others that could be constructed.

#### ROYAL GEOLOGICAL SOCIETY OF IRELAND.

THE annual meeting of this society took place last evening in the Theatre, Royal Dublin Society, under the presidency of Sir Robert Kane, LL.D., F.R.S. The chairman in a lengthened address reviewed the labours of the society during the past year, and alluded to the loss they had sustained by the death of Colonel Meadows Taylor. In resigning the office of president, which he had held during the year, he had to thank them for the high honour which they had bestowed on him by the election.

Dr. Houghton read a paper by Mr. Frank Rutley, F.G.S., on "Microscopic Structure in Trachylite from Slievenalargy, County Down," together with an appendix thereto by himself.

The Rev. Maxwell Close was installed as president for the current year.

#### HOME AND FOREIGN NOTES.

It is reported that an ancient sculptured cross has been found on Devenish Island by some of the workmen engaged in the conservation of the ruins thereon.

The St. Patrick's Amateur Society of Change Ringers have consented to ring the fine peal of bells attached to St. George's Church, for service on Sunday evening.

ROYAL DUBLIN SOCIETY'S SCHOOL OF ART.—This afternoon his Grace the Lord Lieutenant will distribute the prizes to the successful pupils of the above school.

HALIFAX CHURCH RESTORATION.—Sir G. G. Scott has replied to the statement made in the *Athenæum*, and copied by us, in reference to the contemplated works at this church, and proves that some of the statements made are erroneous.

INSTITUTION OF ENGINEERS (LONDON).—We are asked to announce that there are now on the books, 897 members, 1,665 associates, 15 honorary members, and 440 students; together, 3,017 of all grades—an increase of 208 since the same date last year, or at the rate of 7 per cent. nearly.

A COSTLY HOTEL.—The following figures represent the cost of the St. Pancras Hotel:—The buildings cost £304,355, the decorations and fittings £49,000, and the furnishing £84,000. The hotel is carried on by the Midland Company itself, the profits, after paying the manager a commission on the net proceeds, go into the coffers of the company; and so far the company is satisfied with the result of the undertaking.

NORTH DUBLIN TRAMWAYS.—At the suit of Mr. James Bell, one of the surveyors for County Dublin, a fine of £20 has been imposed on the North Dublin Tramways Company for having, through their contractor, broken up and allowed to remain in a state dangerous to the public, about 150 yds. of the road over Drumcondra Bridge. The contractor undertook to have the track laid forthwith.

NEW REREDOS, SALISBURY CATHEDRAL.—Our contemporary the *Builder* in its last issue gives a view of the above. It is composed of alabaster, with columns of coloured marble. The parapet has a jewel in the centre of each circle. The arch above the Saviour was suggested by the entrance arch to the Chapter-house, Westminster. The whole has been executed by Messrs. Farmer and Brindley, from a design by Sir G. G. Scott.

RATHMINES AND PEMROKE DRAINAGE BILL.—Notwithstanding the opposition brought against this bill by the Corporation and other bodies, the committee in the House of Lords declared that the promoters were at liberty to proceed with the bill, the preamble was proved. It would be interesting to subject to analysis the evidence brought forward by the Corporation of Dublin on several points.

THE AUDIT OF THE CORPORATION ACCOUNTS.—Mr. John McEvoy and his co-labourers have performed valuable service during the audit of the Corporation accounts by the Government Auditor. Many facts which were glossed over were brought clearly into the light. Why should there not be a permanent "Ratepayers' Association" in Dublin? They are spreading rapidly over London and the provinces of the sister kingdom, and they have already succeeded in reforming many local bodies, and putting an end to jobbery and wasteful expenditure.

HEALTH OF DUBLIN.—For the week ending 10th inst. the death-rate was 33.5 per 1,000. In London it was 26.3; Glasgow 33.5; Edinburgh 21.4. Two cases of small-pox proved fatal—a man aged 25, and a girl aged 8, neither of whom had been vaccinated. Convulsions carried off 14 children. 41 deaths resulted from bronchitis, and 9 from heart disease. 61 of the persons whose deaths were registered were under 5 years of age (30 being infants under 1 year); and 53 were aged 60 and upwards, including 32 aged 70 and upwards, of whom 10 were octogenarians, 2 (men) were stated to have been aged respectively 92 and 97 years, and 1 (a woman) was returned as 105 years old.

THE ASSISTANT COUNTY SURVEYORS.—A bill is being promoted, the object of which is to obtain better salaries for these public servants, and also retaining pensions. The salaries at present of the assistant county surveyors of Ireland are fixed at the starvation point of £80 a year. It is proposed to enable grand juries to fix it at £120 for the first year, and increase it by £10 a year up to a maximum of £200. It is stipulated that no one shall be eligible to be appointed who is less than 26, or more than 45 years of age. We trust that the bill will shortly become law, and justice rendered to a badly used but most deserving class of men.

ANCIENT MONUMENTS BILL.—Since our last issue Sir John Lubbock has succeeded in carrying the second reading of his important bill, the object of which is to appoint a committee to take measures by obtaining possession of, by agreement or by compulsion, any ancient monuments or antiquarian relics which may be liable to injury. The commission, as it was proposed in the bill, should consist of the Master of the Rolls, the President of the London and Scottish Societies of Antiquaries, the President of the Royal Irish Academy, and seven nominated members—the Dukes of Devonshire and Argyll, Lord Talbot de Malahide, Dr. Ferguson, Vice-President of the Royal Irish Academy, Mr. A. Lane Fox, Mr. Evans, and Mr. J. Stuart, of the General Register House, Scotland. The bill has been referred to a select committee.

THE NUMBER STILL SPEAKING IRISH.—Professor Kavanagh has addressed a letter to the Chief Secretary for Ireland in reference to his remarks a few days ago in the House of Commons, on which occasion he said that the Irish language was only spoken at present in a small number of districts. In Leinster, according to the census of 1871, only 12 in every 1,000 of the population were returned as speaking Irish. In Ulster 46 in every 1,000 were returned. Coming to the provinces of Connaught and Munster, Professor Kavanagh proves from official returns far different results. In Connaught, in 1871, 50,154 are returned as speaking Irish only, and 279,039 as speaking Irish and English—total, 329,191, or more than 37 per cent. of the province. Taking the two provinces of Munster and Connaught, amongst a population of 2,239,698, the number found speaking Irish only is 84,019, and the number speaking English and Irish 631,617—total, 715,636, or nearly 32 per cent. speaking Irish; a little short of one-third of the whole population of the two provinces.



## THE ROYAL DUBLIN SOCIETY.

## PROPOSED SCIENCE AND ART MUSEUM.

At the adjourned meeting of the Royal Dublin Society, held on the 8th, to receive a statement from the gentlemen delegated by the council pursuant to a previous resolution "to treat finally with the Government as to the negotiations pending" for the establishment of a Science and Art Museum in this city, the assistant secretary read the following memorandum of provisions (supplementary to those contained in Lord Sandon's letter of the 9th February, 1876) agreed to at meeting of the 5th March, 1877, attended by Sir Michael Hicks Beach, M.P.; Viscount Sandon, M.P.; Mr. W. H. Smith, M.P.; Mr. John F. Waller, LL.D.; Colonel Charles C. Vesey, Mr. Samuel F. Adair, Mr. G. Johnstone Stoney, F.R.S., Secretary R. D. Society:—

The Government will allot to the Royal Dublin Society in Leinster House such accommodation, free of rent and taxes, as in the judgment of the Government is sufficient for the functions of the society still remaining to it in science and agriculture. The conditions of occupation will be the same as those accorded to the learned societies in Burlington House. The Government will propose a grant of £10,000, to be invested by the society with the approval of the Government, and to be made subject to the trusts of the present charters, or any alteration of them, in full compensation for any proprietary right of the society in the lands, buildings, or collections, with the exception of the scientific serials, transactions, &c., of other learned societies, and the works of art at present in Leinster House, of which last a list shall be made, to be approved by the Government. Provision to be made for full and free access by the public at all reasonable times to the serials and transactions referred to. The opinion of the librarian of the British Museum shall be taken as to any earlier editions of modern books, or duplicates, which in his judgment are not required for the national library; and such books shall be re-transferred to the Royal Dublin Society. The society in future to provide its own staff of officers and its own printing; but the Government will authorise the Stationery Office to continue to print the proceedings and transactions of the society—limiting them strictly to its scientific work—for a period of five years from the date of the transfer of the collections, with the view of assisting the society to re-organise itself on an independent basis. The lecture-hall, laboratory, and the necessary offices to be reserved to the society, or an equivalent provided. The existing privileges of passing through Leinster Lawn and the courtyard of Leinster House to be reserved to members of the society. Subject to the consent of the director, the collections in the Botanical Gardens and in the Natural History Museum to be available as heretofore in illustration of the papers read before the society. Members who have joined the society before the 1st of January, 1878, to be allowed to borrow books as at present from the library, subject to regulations to be laid down by the librarian, and to have free admittance to the museum at all times at which it is open to the public. The Government will either allow the agricultural shows of the society to be continued in Kildare-street, affording equal facilities to those enjoyed at present, or provide, either by grant or by lands and buildings, for a transfer of the shows to some other convenient place. The Government will inform the society as soon as possible whether the shows will be left where they are, or removed. If such transfer is effected, account shall be taken of any loss the society may be subjected to by reason of the removal of the shows from the centre of the city to the suburbs, or by discontinuance of the aid given in the maintenance of the buildings, and the Government will ask for votes accordingly. Vested interests of officers paid from public funds shall be preserved as far as they are so paid. The society to be relieved of any expense with regard to the School of Art from and after the passing of the bill. The library and collections of the society with the exceptions above named, to be conveyed to the Government to be placed in the proposed national library and museum, and to be retained in Ireland on behalf of the public. The Royal Dublin Society will undertake to assist in the passage of the bill now before Parliament, and will concur in the introduction of any clause or clauses that may be necessary to vest the library and the collections in her Majesty's Government for the purpose of a public library and museum. The Government will be prepared, at the request of the society, to recommend her Majesty to grant such a new charter or charters as, in the opinion of the Government, may be re-

quired by the altered circumstances and condition of the society.

The document was signed by Mr. Smith, secretary to the Treasury, on the part of the Government; and by Mr. G. Johnstone Stoney on behalf of the Royal Dublin Society. Mr. C. Uniacke Townshend, the other member of the deputation, concurred in this memorandum, but was unable to attend the meeting of the conference at which it was signed.

These final proposals on the part of the Government having been accepted by the Royal Dublin Society, we suppose the controversy is at an end. The society has certainly succeeded, by holding out, in obtaining better terms than were first proposed by the Government; but the fact is clear, the Royal Dublin Society, after nearly a century and a-half of existence, has ceased to be an essentially national or local institution. Its objects may indeed be, in the future as in the past, national, but its management will no longer be local. In a word, the Royal Dublin Society has become centralized, and will be controlled from South Kensington.

## HOSPITAL CONSTRUCTION AND VENTILATION.

In compliance with the invitation of the guardians of the parish of Barrow-in-Furness, Mr. Arthur Jacob, a professional gentleman of rising reputation in the sister kingdom, and brother to our well-known townsman Dr. Jacob, of the *Medical Press and Circular*, has lately prepared designs for new workhouse buildings in the above town. The plans and arrangements appear to be exceedingly good, and suitable to the locality and site, and nothing is omitted that could add to the comparative completeness of the work. Mr. Jacob, in preparing his designs, has availed himself of the best information accessible, but, whilst adopting what is good in the plans of others, has evidenced foresight and considerable practical skill in improving upon them. His report descriptive is clear and satisfactory on all the important points, and particularly so in matters of drainage, ventilation, and general sanitary requirements. We were mostly interested in that portion of his report dealing with hospital construction in connection with the workhouse buildings, and the manner in which he has dealt with this very important question. As the information given and the principles laid down will be found to be generally applicable over the British Islands, we give that portion of Mr. Jacob's report which relates to the hospital, supplemented by his recommendations in the matter of general sanitary arrangements:—

## HOSPITAL CONSTRUCTION.

Before entering upon the designs for the hospital, it becomes necessary to arrive at some data relative to the number of male and female patients to be accommodated in the institution, as, doubtless, the ratio of sick to healthy paupers will vary somewhat with circumstances and locality, as the proportions of the male to the female inmates of the workhouse itself are found to do. I learn from the architect to the Local Government Board, that the proportion of sick to healthy will range from 20 to 25 per cent., and this statement is borne out by the returns which I have received from the several workhouse officers from whom I have obtained information.

For reasons given above, I have fixed the proportion of male to female paupers at 3 to 4, and for a total of 200, I have taken 80 males and 114 females. The proportion of sick in these classes, if estimated at 25 per cent., will be 22 males and 29 females, and for these numbers I have provided in the hospital, with a few beds in excess to meet contingencies.

In considering the designs for this part of the undertaking, I have carefully kept in view the points laid down by the Local Government Board for observance; and further, have availed myself of the valuable information and suggestions obtained from reports of Sir Ranald Martin, Inspector General of Hospitals, as well as those of Miss Nightingale, perhaps the greatest authority at present on the question of hospital detail. The

following are the principles laid down by these eminent authorities, and which I have in every instance adopted, unless when the contrary is stated:—1. No hospital to be more than two storeys. 2. Wards to be flooded with sunshine, the windows bearing a proportion to the wall space of not much less than 1 to 2. 3. Separate pavilions, side by side, the best arrangement. 4. Width of wards to be not more than 30 ft. 5. Windows to be double tripartite, like those of the Middlesex Hospital. 6. Baths should be separated from the pavilion, but connected with the corridors, but a bath-room for bad cases should be placed adjoining the water closets.—This recommendation I have followed out as far as possible. I have however placed the principal bath-rooms at the end of the ward instead of in the corridor. The upper corridors are intended to be quite open to the external air, and consequently patients could not approach the bath-room without risk of cold. 7. Each ward should have a nurses' room looking into the ward, and scullery attached, and store presses outside the ward. 8. Special regard should be had to ventilation. Trust for pavilion ventilation in this climate, to open windows and fire-places, and provide plenty of ventilation under the basement floor.—I have adopted the plan of fire-places in the centre of the room, as the new Herbert Hospital is arranged. 9. Windows should reach from within 3 ft. of the floor to 1 ft. of the ceiling. 10. Closed corridors should not be higher than the ground floor, but an open verandah should be provided above for convalescents to exercise in. 11. Provide no more than 32 beds in a ward, 16 on each side, with a window to every two beds. 12. Small wards may be sanctioned for very bad cases.—This provision has been made. 13. Each bed should have from 1,500 to 2,000 cubic ft. of air space. In exposed situations the smaller ones will suffice, 90 square feet a fair average per bed.—This is greatly in excess of the requirements of the Local Government Board, who prescribe 960 cubic ft. for the worst cases and 80 ft. of floor space. For ordinary sick I have provided 84 ft. floor space and 1,008 cubic feet of space; for foul cases, 90 ft. floor space and 1,080 cubic ft. of space; and for lying-in cases, 82 ft. floor and 990 ft. cubic space.—14. Place water-closets, lavatories, and baths at the far end of a ward, opposite the entrance, cut off by a separately ventilated and lighted lobby. 15. Provide a lift near the nurses' room. 16. Staircases to be wide and thoroughly ventilated up to the roof. 17. Supply water at high pressure over the whole building. 18. Provide garden ground for exercise. 19. Kitchens and wash-houses should be detached.—A boiler is provided near the dead-house for infected linen. The kitchen is situated adjoining the main corridor, wholly detached from the pavilions, and in the most convenient position for distributing the food and clothing to the pavilion. 19. Cooking apparatus should be in the centre of the kitchen, and dressers against the walls. 20. There should be a press in each ward. 21. The axis of the wards should be north and south, a little inclined to the east, in order to secure the greatest amount of sunshine.—This recommendation has been literally complied with.

I now propose to refer to the instructions prepared for guidance by the Local Government Board, and which it was your desire should be followed in the preparation of the plans of the undertaking. It will be seen from the general plan that the hospital is situated at the eastern end of the grounds, at a level some 5 ft. below the general level of the workhouse. This will, in my opinion, be of advantage as rendering the wards somewhat less exposed to the prevailing winds than the workhouse itself will be. The pavilions are arranged at each side of the administrative department, and a space is left at the rear upon which to erect additional ward accommodation, when the time for doing so may arrive. The administrative department comprises on the ground floor, an entrance hall, and a room for meetings of committees, which can also be used by the medical officer as a sitting room, when midwifery or other urgent cases may render his presence in the building necessary for several consecutive hours. There is also a dispensary, a room for the head nurse, and separate rooms for the male and female attendants, with the usual bath and water-closet accommodation. On the first floor there will be a spare bedroom for the medical officer, with water-closet and bath-room; two bedrooms for the male officers, two for the female, and one for the head nurse, with water-closets, &c., attached. The kitchen is situated at the rear of the building, from which it is separated by a corridor, in order that food, &c., may be conveyed to the pavilions with the least amount of labour; and immediately adjoining the kitchen are situated store rooms, scullery, and coal and wood houses.

The pavilions are situated one at either side of the administrative department at a distance of 55 ft., which exceeds somewhat the rule laid down by



Sir Ranald Martin, that the distance between hospital buildings should not be less than twice their height, as measured from the ground floor. The western pavilion, that intended for the female patients, will contain accommodation for 32 patients, which is rather more than 25 per cent. of the total number of female paupers that will reside in the workhouse when fully occupied. The upper floor I have designed of almost similar dimensions to the Herbert Hospital, which is now regarded as the most perfect model of its class. There are a variety of details connected with that institution, nearly all of which may be adopted with advantage, but which cannot of course be shown on sketch plans. I have made provision in the main ward for 12 beds, which will be sufficient for the accommodation of the ordinary sick, and have set aside for the lying-in women a ward to contain 4 beds, with a labour room immediately adjoining. Near to this ward there is a separate bath-room and water-closet, with a nurses' scullery, and a lift to raise provisions, clothing, &c., from the corridor below. On the same floor is situated, adjoining the main ward, the nurses' room and a closet, and there is also provided a room to hold 4 beds for the reception of children, or of bad cases which may require partial isolation. To this ward is attached a separate bath-room.

On the ground floor I have provided a ward to contain 12 beds for the accommodation of classes 3, 4, and 5, all of which may, I believe, be grouped together. The ward is approached by a separate entrance, and has the necessary bath-room, lavatory, and water-closet accommodation, separated by a thoroughly ventilated lobby. Should it be thought desirable to separate the above classes, this can be done by a judicious arrangement of partitions. On the same floor I have provided a day-room, fully equal as regards cubic and superficial space for the whole of the inmates of the pavilion.

The eastern pavilion—that intended for male patients—is in arrangement very similar to the female side. It comprises on the ground floor a ward containing 10 beds for the reception of venereal, itch, and offensive cases, with a separate approach and bath-room; the front part of the building will be a day-room of ample size for all the inmates of the pavilion. On the upper floor there will be a ward containing 10 beds for the reception of ordinary sick, another ward to receive four boys, and a supplementary ward in front for the reception of special cases requiring isolation. In other respects the details are similar to the female side.

In order to complete the information regarding the hospital, I think it as well to set forth the several requirements of the Local Government Board, with a statement to each item of how far such requirements have been complied with in preparing the designs:—The wall space in wards for ordinary sick, itch, and venereal cases should be 6 ft.—The wall space provided in these wards is 8 ft. 6 in. For lying-in and offensive cases the wall space should not be less than 8 ft.—The wall space provided in the ward is over 8 ft. Each bed should stand in the centre of its own allowance of wall space.—This rule has been observed except in the small ward for children, where it could not be managed without great sacrifice of space. Day-rooms should accommodate not less than one-half of those who occupy the night-rooms: 20 ft. of floor space for each person.—The day-rooms are fully adequate to this provision. No corridor should be less than 6 ft.—All corridors are 6 ft. Sick wards should be 20 ft. in width and 10 ft. to 12 ft. high, and infectious wards should be 20 ft. in width and 12 ft. high.—These dimensions have been preserved. All wards devoted to the sick should have external windows on their opposite side.—This arrangement has been observed, except in the small rooms for children, which are otherwise amply lighted, having windows opening into the corridor as well as in the external wall. The entrance should be in the centre of the large wards, so as not to interfere with the arrangement of the beds.—This arrangement has been complied with throughout. The recommendations in paragraphs 20 to 25 have been without exception observed. Kitchen, scullery, and nurses' room should be provided.—These offices are shown on the plan. Special means of ventilation should be provided.—The mode of ventilation most strongly recommended for hospitals is that known as McKinnel's system. It is simple and effectual, without producing perceptible draughts.

#### SANITARY ARRANGEMENTS.

1st. I would recommend that all the drains be laid at a depth of not less than 6 ft. below the surface, in order to insure the site being thoroughly dry. 2nd. That all rainwater spouts should be trapped, and special ventilating pipes should be carried above the roof, and be connected to soil pipes and sink pipes at their lower extremity. 3rd. That special care should be taken to trap all gullies. 4th. That all the overflow pipes from the cisterns should

discharge freely into the air, and on no account be connected with the drains. 5th. That each group of closets should be provided with a separate cistern, from which water could not be drawn for drinking purposes. 6th. That all pipes from baths and slop-stones should discharge freely into a receptacle outside the buildings, and should be wholly unconnected with the drains. 7th. That the surface of all the airing grounds should be laid with tar pavement or asphalt, and have a sufficient slope from the buildings to carry the surface water to the drains. 8th. That special means of ventilation should be employed in the day-rooms and dormitories, which should be under the control of the workhouse officials, and to which the pauper inmates should have no means of access. I would further suggest that water should be stored at such an elevation as to command the whole of the buildings, for the purpose of extinguishing fire. A capacious tank in the central tower would accomplish this object, until the steam engine attached to the laundry could be set to work to maintain the supply. I also advise that, as a means of security in case of fire, an iron step-ladder should be fixed at the southern ends of all the pavilions; and lastly, that efficient lightning conductors be fixed on the most prominent parts of the structure, as on the central tower and at the angle towers of the pavilions.

I will only add, in concluding this report, that in the preparation of the designs for the new workhouse my chief aim has been to give effect to what I believe to be the desire of your honourable board and the spirit of Poor Law administration generally in England, by providing at a moderate outlay an arrangement of buildings which will comprehend all the highest principles of sanitary science, combined with economy and convenience of administration. A building of this character should not, in my opinion, present either a very ornate or a rudely plain exterior, and I venture to hope that the sketches which I have the honour to lay before you will represent a medium between the two extremes, and meet with your approval.

#### LECTURES ON ARCHITECTURE.\*

BEFORE commencing a new series of lectures, I wish to preface them with a few introductory remarks as to their purpose and scope. I will observe in the first place that they are intended for students, students of art, as taught in this Academy,—not for those only who propose to devote themselves to Architecture as a profession. My earnest wish is to interest you all, if I can, in the subject,—to make you feel that there is something in architecture worthy of the attention of reasonable men,—that it is an art, the oldest of all, able not only to hold its own with its sisters of Painting and Sculpture, by giving delight to the æsthetic faculties, but also to take its place in the ever-onward movement of culture and civilisation. Having regard to this object, I do not propose to treat at length of the complicated details of the technical practice of architecture. This, it seems to me, can be better taught in classes of architects only, and it is, in fact, so taught within these walls by our excellent curator in the architectural school. I shall be satisfied if I can bring before you certain salient points, and thus lead you to take an intelligent interest in architectural matters. I propose to attempt to trace the rise of the various phases of domestic architecture as they have prevailed in this country. My illustrious predecessor, Sir Gilbert Scott, in dwelling on ecclesiastical types, has made that aspect of the question so fully his own, that I will not seek to touch, with weaker hands, that which he has so exhaustively dealt with. I shall, therefore, confine my remarks, this session, to domestic architecture alone. It seems to me, indeed, that the latter is emphatically the problem of the day. Custom and tradition determine the spirit, and even, to a great extent, prescribe the forms of our church architecture, but the laws which are to govern the future of house-building are ever in debate. The habits and wants of whole classes must be studied, under the guidance both of science and even of political economy, before we can hope to succeed in bringing "sweetness and light" to the toiling millions

by providing them with healthy and artistic homes.

If I were tempted to despair of the progress of architecture, it would be from seeing it regarded with apathy. I am not anxious to impose my own views upon you. I want you to think for yourselves, and to bring to the solution of architectural questions that common sense with which the average Englishman is happily so largely endowed. In seeking progress, we must have no fear of criticism. Even if it seem to us often one-sided and unfair, it is better than indifference. This is true, in a special sense, with regard to criticism of professional doings proceeding from laymen. We may perhaps be surprised to read books on building enforcing, in the midst of good advice, well-known things as if they were novelties; but we cannot fail at the same time to notice with satisfaction the hold which such things show architecture to possess on the affections of our highly-educated laymen. Anything is better than the resigned ignorance which proclaims, as if it were a merit, that it knows nothing of architecture.

Do you suppose, if our rulers in Parliament had cared for architecture and for social matters as they do for politics, that our public buildings would be what they are; that our streets would have been handed over to railway companies for disfigurement; and that it would have been left to the present generation to deal with the great difficulty of providing dwellings for the poor in our crowded courts and alleys, foul with the neglect of ages? How is it that not one of the great architectural works now under construction by the State in London has escaped mutilation of features, considered important by their architects, while the very spirit of delay has seemed to preside over their conception and execution? The answer must, I think, be apathy—an apathy which refuses to be stirred amidst the absorbing anxieties of power and place. This being so, I say again that I welcome any signs of lay appreciation of our noble art.

And now I wish to say a few words to those of you who are studying architecture as a profession, to be followed by you hereafter as a means of livelihood. You do well if you are conscious within yourselves that you love the art for its own sake. If not, you will be sorely tried by the cares and responsibilities with which you will find the practice of architecture to be surrounded. It is difficult, for example, to overstate the depression which comes upon the architect, when he has to descend from his day-dreams of solemn cathedrals and airy palaces, to the prosaic realities of estimates and "quantities," builders' contracts, and "extras and omissions." I wish, for many reasons, that he could avoid these things, and perhaps some day it may be possible to do so; but at present this cannot be, and the architect must often devote his energies to that which appears to be unworthy labour. The mention of this part of the duties of an architect at the present time leads me to add a word or two on a not very welcome topic, which has lately occupied the attention of newspaper readers. It can scarcely be needed for me to say to you that before all things it is necessary for an architect to be a man of honour, a trustworthy agent, a gentleman in the best sense of the word. I am happy to believe that such is the rule; but it has been lately said, chiefly by anonymous writers, that exceptions exist, and that some architects have allowed themselves to touch the wages of dishonour. I could wish, as I have just said, that the architect could follow his art alone, and have nothing to do with money matters. In any case, however, his integrity should be beyond question, and the public bodies which represent the profession rightly make this all-important matter the keystone of their regulations. We are told that this is not enough, and a distinguished member of the legal profession has insisted that legal enactments are needed. Be it so. I would welcome any well-considered scheme which would give legal effect to the moral reprobation of abuse.

\* By Professor Barry. First lecture. Delivered at the Royal Academy on Monday, February 26th.



I recognise fully the responsibility which attaches to any one who is engaged to render professional service. I gladly welcome any practical suggestions to fix this responsibility, and I would do so all the more willingly when they are found to emanate from that great irresponsible profession, the Bar of England—that profession which alone asserts the complete freedom from liability of its members, even in cases where important duties have been liberally paid for, but have not been performed. I say this because it is not too much to hope for, that the “eye for defects” so appropriate in the case of a law reformer will have its keenness of vision so strengthened by observing the deficiencies of other professions that it will not suffer itself to be closed as long as any blemishes can be seen nearer home. By enforcing on *agents of all kinds* the full extent of their responsibilities we may thus obtain reforms which, without impairing the lustre of a noble profession, may increase its claims on the respect and confidence of the public. This is not the opportunity for dealing further with this subject; but I have felt that in addressing those who have the future of the architectural profession in their hands, I could not do wrong to suggest to them a ready acceptance of anything that may serve to show that their honour is unimpeached and unimpeachable. Believing as I do that the fair fame of architects will stand comparison with that of any other class or profession, I shall gladly see enacted any general law that may be thought desirable to recognise the principle of responsibility of all professional men in a full and comprehensive manner. Having now indicated the spirit in which I propose to address you, I will proceed with the first lecture of the season, from which I hope I have not detained you too long by these introductory explanations.

I think I cannot begin my fourth course of lectures better than with a few reflections on originality. In considering our subject last year, I took occasion to inquire into the influence of nature on architecture, and we found, as you may remember, that it was of an indirect character, leading us to attempt to grasp general principles, rather than to court inevitable defeat by efforts of direct imitation. It is well, I think, to bear this conclusion in mind when we come to inquire into the question of originality in architecture. We all appreciate the spontaneous and unconventional charms of Nature, but for art there are rules which we must frankly recognise. Originality in architecture, therefore, must be subject to certain restraining circumstances, which it is our duty to study with care and attention.

Many a young man of talent begins with the idea that it is easy to be original; the wisdom gained from the experience of ages seems to him foolishness. A new life opens before him. All things are to be new; the beaten track is to be deserted, or left to the timid and worn-out. His art is to take a new departure, and whatever he does, at least it shall not be commonplace. I suppose most of us, at some time or other, have experienced feelings akin to these. It is well that it should be so; they are a part of those generous impulses of youth without which the world would, indeed, be badly off,—a prey to the sordid calculations of selfishness, ever sinking deeper and deeper into the hopelessness of a fatalist philosophy. We may, therefore, well rejoice that a spirit of independence exists among us; for in it is life, and where there is life there is hope. The architect, if he have not originality, must, at any rate, be possessed with the spirit of a true reformer. He will do little in his art unless he has enthusiasm, and an enthusiasm that needs to be checked is better than a sluggishness always requiring to be spurred and stimulated, working at best spasmodically, and often to little purpose, for lack of zeal.

Now, in architecture, I need scarcely point out to you, originality is subject to very considerable limitation. In its quality of useful-

ness, in its dependence on material considerations, and also in its financial aspect, you will at once perceive the elements of restraint. These will soon make themselves felt by the young architect, and it is well for him if they do not crush his high aspirations, and so dishearten him. He has to learn that his art must be exercised in accordance with common sense, and that originality is not to be attained by conscious effort.

It has been well said by Sir Joshua Reynolds that, “as our art is not a divine gift, so neither is it a mechanical trade. Its foundations are laid in solid science; and practice, though essential to perfection, can never attain that at which it aims, unless it works under the direction of principle.” This is true of architecture, even more than of other forms of art. The architect must be versed in science before he can design a building that shall stand; he must enter into the spirit of the rules of his art before he can apply them intelligently; and while ever remembering the artistic side of his calling, he must not neglect the more prosaic considerations of utility and sound construction. If this be conceded, you will follow me the more readily in the inquiry into originality which I propose to prosecute in this lecture.

Now originality in architecture is not likely ever to be manifested in an absolute sense. The various forms of detailed construction, such as arches and columns, which are scattered over the surface of the globe, may have exhausted the combinations of possible forms, and I do not think we need concern ourselves to-night with the question of the invention of a new style of architecture. It is indeed not necessarily creditable to an architect to have done that which has never been done before, for he may have neglected considerations which have very properly prevented others from falling into mistakes,—in which, it may be, he is foolish enough to glory.

If we realise properly the true nature of our art, we shall not be always seeking for novelty as the chief desideratum. Architecture is the outcome of accumulated experience, and we cannot, therefore, imagine that we are wise enough to dispense with the assistance which such experience offers to us. To do so would be to destroy the scaffolding before we have raised the building.

An originality, again, which is sought for only in strange and startling combinations, is, more often than not, no originality at all, but merely a tasteless jumble of discordant details which may have struck the fancy of the young architect at different times and places. An opportunity offers, as he thinks, for their employment, and the sketch-book is emptied, and the *disjecta membra* scattered, with a result which is neither beautiful in itself nor consistent with any sound principles of composition.

I have said that our architecture must be reasonable, for we have to bear in mind that men do not erect buildings to please architects, but to serve their own needs and purposes. If this necessity be (as doubtless to some extent it is) a difficulty in the way of originality, it will, nevertheless, if fairly recognised, save us from some other snares which lie in our way in the direction of imitation. Our architecture must as we know be affected by a variety of causes external to ourselves, such as climate; and there are other influences which I may call internal, which are not less powerful. We know that the Parthenon would not bear transplanting, and the direct imitation of existing buildings in other styles is confessedly intolerable. If the sunny porticos of the south are out of place in our more rigorous climate, it is no less true that where the sun is a friend only too rarely seen, we do not act wisely in excluding his rays by heavy mullions and clumsy bars for no better reason than that these details have been used at a former period.

The temptation to rely too absolutely on the past is ever great, and to some minds almost irresistible. “We have seen and admired the masterpieces which have excited the admiration of ages. Let us imitate them,—like causes produce like effects. They are

great successes—wo shall succeed also.” Such reasoning as this has the fatal effect of unreality. It ignores the differences of time and circumstances, and, if literally followed, would degrade our art into the mechanical trade which we feel it cannot be. No; good architecture must be more than a blind imitation of the works of others, and this it is which makes the question of originality of so much importance.

I have spoken of differences of time. These cannot but affect our architecture, for they enter into all our public and private habits. It is true that the essential requirements of mankind must (with certain limitations) be always and everywhere the same, but, as ages roll on, various phases of those requirements come with exceptional prominence, and demand the attention of the architect no less than that of the statesman and philosopher.

Thus the architectural splendours of Mediæval art mark a period in which ecclesiastical influences were dominant. Churchmen represented the intellect and refinement of the age, and they have earned the gratitude of posterity by the splendid works with which they have endowed us. How great was their power and skill we may see throughout our land, in our stately cathedrals, abbeyes, and churches. No one must underestimate the importance which religious influences have brought to bear on art, and the support given by them to the whole framework of manners and morals in the Middle Ages.

But a time came when society, thinking itself able to move alone, began to disdain leading-strings, and to regard as mischievous the guides and safeguards till then seemingly indispensable. It was to these awakening perceptions that we owe that great revolution of thought which we call the Reformation. We cannot here speak of its religious aspect, but we may briefly consider some of its influences on architecture. In the first place, it brought about a disposition to break with precedent, to adopt change, and to welcome novelty.

In the preceding times men were content to follow in the footsteps of their immediate predecessors; they were accustomed to take their architecture, as they did their religion, on trust; gradual alterations of detail might be allowed in either, but in no case could any radical changes be permitted. You can see the effects of this spirit in almost any of our great historical churches, in which you may trace with precision the modifications of mouldings, tracery, and sculpture, that mark the successive phases of Mediæval art so clearly as to enable us to fix without difficulty the dates of the erection of each portion of such buildings. The clergy, being the great church-builders of the time, were the keepers and preservers of architectural traditions. A certain uniformity of plan and proportion was maintained, subject, of course, to limitations due to local or peculiar circumstances in certain cases. The workmen knew only the forms of art which they saw around them, and were therefore ready to submit to the authority which claimed their obedience. Originality was not sought for its own sake, and the whole progress of architecture resembled the gradual growth of natural objects. The change which came with the reformation broke with all this. It was not only a change in the forms or even in the essentials of religion. It was a great uprising of the human intellect, demanding reasons where formerly it was contented with commands. Knowledge was sought in all directions, and printing, newly discovered, came to its aid. Not only the Bible, but literature generally, became spread throughout the world, the priceless possession of the many, no longer the exclusive privilege of the few. Nations began to interest themselves in each other, and an approach was made towards free communication between countries. Everywhere there was excitement—a longing for light, a determination to assert freedom.

(To be continued.)



## LONDON

ARTISANS' DWELLINGS COMPANY:  
RISKY TACTICS.

On Saturday, the tenth ordinary general meeting of the Artisans', Labourers', and General Dwellings Company was held at the Westminster Palace Hotel. Dr. Baxter Langley presided. The revenue account showed that the rentals of the company's property had brought in £19,853, and that there has been a profit of £2,130 on land actually sold, and £1,680 as interest on repayments. These taken with capitalised profits from ground-rents, &c., amount to £8,709, after certain deductions had been made. The directors recommend that a dividend of 6 per cent. per annum be declared, and £2,451 be carried to the reserve fund. Mr. Dudley Fortescue complained of not having received a notice of the meeting, which was echoed by Mr. Evelyn Ashley, M.P., and Earl Fortescue. Mr. Swindlehurst assured the gentlemen that the fault must be in the Post-office. A shareholder asked how the company could pay so high a dividend when they had so large an amount of unremunerative capital invested. Mr. Greening explained that the company had a large amount of property upon which would shortly be realised large profits. There were also the ground-rents. The company had a right to draw upon such property, and as a matter of good policy it was wise to keep the dividend at 6 per cent. so that they might induce capitalists to come and help them to complete their undertakings. Mr. J. Pearce said he had gone thoroughly into the accounts, and could show that the earnings of the company did not warrant a dividend of 6 per cent.; he felt bound to tender his resignation as one of the auditors of the company. Amendments suggesting 5 per cent. dividend, and no dividend, were severally proposed and rejected. The report was then adopted, and £600 were voted to the directors.—*Builder*.

MESSRS. RICHARD MARTIN & CO.'S  
TIMBER CIRCULAR.

MESSRS. Richard Martin and Co., of Sir John Rogerson's-quay, observe in their circular for this month:—"The prices of red deals continue to advance abroad, and suitable parcels are exceedingly difficult of purchase, even at the enhanced prices. Our stock is still large, and we continue to give our customers the benefit of the large purchases we made before the prices materially advanced. Spruce deals have not advanced in value, and we do not see any reason to anticipate an increase in the price of these goods for some time. The slate market has been very well supplied indeed, and a reduction in price has been the result. In addition to our stock, we have three cargoes on the way from Port Penrhyn, one from Carnarvon, and one from New York. Of square timber our stock is very large and well assorted. We would ask particular attention to the fine cargo of sawn pitch pine, just landed ex "Annie Barker," the quality and manufacture of which is all that can be desired." In their "Priced Mahogany Circular" there are particulars given respecting some logs of mahogany and American wainscot oak, offering advantages which ought to secure purchasers. They offer the latter at 5s. 6d. per cubic foot, calliper measure. The wood opens well, and is somewhat darker than Memel wainscot oak.

## TO CORRESPONDENTS.

NOTES ON THE IRISH LANGUAGE.—Some notes on the derivation of certain Irish words, and some remarks upon the Irish language, will appear in our next issue.

OLD TIMBER HOUSES.—There are not at present in Dublin any old timber or half timbered houses of note. The last specimens of the cage-work timber structure formerly existing, were taken down in the early years of the present century. Woodcuts of some of these houses will be found in the first volume of the old *Dublin Penny Journal*, with a few particulars supplied, we believe, by the late George Petrie.

Some articles intended for this issue we are obliged to hold over.  
RECEIVED—J. P.—An Assistant Surveyor—H. B.—Q. C.—A Working Man—R. H. A.—A Lady—M. D.—T. C.—F. 1, and others.

EPPS'S COCOA.—Some time since, in a series of articles in these columns upon food, we spoke in terms of unqualified praise of Messrs. Epps and Co's "Prepared Cocoa." The opinion we then expressed as to its purity and nutritious qualities has been fully endorsed by the public, as shown in its increased and steadily increasing consumption. We believe that Messrs. Epps's Manufactories are now the largest of the kind in the three kingdoms, and the total quantity of "Prepared Cocoa" consumed at the present time approaches four millions of pounds annually. This result is not surprising. The dietetic properties of native cocoa are well known, but in the form prepared by Messrs. Epps, Homoeopathic Chemists, they are rendered additionally valuable, both on account of their increased nutritive power and digestible character.—*Civil Service Gazette*.

## NOTICE.

Correspondents should send their names and addresses, not necessarily for publication.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.

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## THE IRISH BUILDER.

VOL. XIX.—No. 415.

THE ARYAN ORIGIN OF THE  
GAELIC RACE AND LANGUAGE.\*

**A** WORK which, on its first appearance in 1875, met with a very favourable reception, even in quarters where a certain amount of adverse criticism might be expected, and which has in a few months reached a second edition, is a work which might be allowed to make headway in future on its merits without further criticism, if there were not strong reasons for the critic in the present instance acting otherwise. He believes that the more the book becomes known, the more it will be read; and the oftener that it is read, the sooner will the object for which it was written be attained.

Irrespective of creed, country, or party, the book under notice may be perused with profit and pleasure by intelligent Englishmen and Scotchmen. Pre-conceived notions, national leanings, party bias, and dislikes arising through religious differences, should not stand in the way or prevent any intelligent native of either of the sister kingdoms from thoroughly reading through "The Aryan Origin of the Gaelic Race and Language." The book is not a purely scientific one—that is, it is not written for a special, but for a general, class of readers. In it the student of English and Scottish history will find ample matter for thought, and ample materials for investigation; and, as the student of history will be the better fitted to pursue his studies by the light of philology, he will find this work will afford him no small aid in the prosecution of his task.

In English colleges and schools little is still learned of Scottish history, and less of Irish. In fact, the latter has been ignored, as her language has been; but why need we wonder at this, when we have had professed native historians and antiquaries in our midst in the last and present century who had the effrontery to denounce much of our history as fignments! A knowledge of Greek and Roman history has been very properly

sought and acquired for centuries in the British Islands, and the study of the dead languages prosecuted to the neglect of the living at home, which would have afforded scholars a key to unlock the treasures they sought.

We are indebted to distinguished foreigners for first drawing attention in a practical way to the mine of philology that is contained in the Irish language, bespeaking and proving its high antiquity and purity. Notwithstanding the labours of eminent Continental and British philologists and scholars, there are thousands of men who deem themselves educated who would not and do not scruple to stigmatise the Irish language as a barbarous jargon. What men do not understand, they seldom or ever have a good opinion of; and what they will not understand, it may be taken for granted they dislike for particular reasons. It is sufficient for their part to know that it is unfashionable, and, independent of their own prejudice or ignorance, that is enough in itself to satisfy them that it is not worth notice, knowing, or acquiring.

The spread of education and scientific study has been achieving wonders within the last few years, and though prejudice in respect to matters Irish may still exist for many years, ignorance will not be allowed to stand excused. Facts are stubborn things, and they are being amassed now, not alone by Continental scholars, but by British ones, in proof of the Aryan origin of the Gaelic language. It is time, therefore, that native writers should be heard, and heard with no uncertain voice. So long as they pleaded their own cause, and supported it by the opinions of their own countrymen and those allied to them by some friendly tie, they worked at a great disadvantage. No matter how cogent the arguments, or how strong the facts brought forward by native writers half a century ago in favour of a high civilization many centuries since in Ireland, or the production of annals in verification, there was scarcely an audience to afford a fair hearing in the sister kingdom. Even in our own country the audience was limited, and confined to a few who made Irish antiquities their special study. Native writers now are certain to be heard on matters of science and art and general literature, and though the masses of the people may be unmoved, those in educated circles are obliged to take some notice, and profit by it.

Canon Bourke's book comes before the world at a time when men of respectable intelligence, not to speak of scholarly attainments, are perforce obliged to listen. Men of learning will listen and examine for themselves, and if proofs are produced so much the better. The work under notice on "The Aryan Origin of the Gaelic Race and Language," is full of corroborative evidence of results obtained by scholars in Germany, France, Switzerland, England, and Scotland, who have conclusively proved that Irish Gaelic is in origin one with Sanscrit, Greek, and Latin, and that it is amongst the older branches of the one primeval Aryan tongue.

With the above evidence to strengthen his position, Canon Bourke in the discussion of his subject could have but little misgiving as to the success of his task, seeing that he was otherwise well qualified by his knowledge of the Irish tongue. The labour he has undertaken has, in our opinion, been well executed. The book is at once a history of the Gaelic race and language—the con-

struction of the language, its changes, when in perfection what led to its decline, its present position, and the means that should be taken for its preservation and extension.

A good deal of nonsense has certainly been written respecting the Irish race and language, and principally by men who gave very little study to these subjects. Vallancy and his co-labourers in the *Collectanea de Rebus Hibernicis*, which was commenced in 1774, by their contributions, kindled a spirit of literary activity, which afterwards proved useful, but the fanciful theories put forward by Vallancy and some of his co-workers had a most injurious effect for many years on the study of the Irish language. Vallancy, after all, must be accorded some praise for his industry on the head of our language and antiquities, considering the time in which he lived, and remembering that he was not a native of Ireland. If Vallancy made our language appear ridiculous in the eyes of foreigners, Ledwich, his opponent, did his best to rob us of our early history while acting as the illustrator of our antiquities. When the discontented antiquarian section, headed by Ledwich, seceded from the *Collectanea*, edited by Vallancy, and established the *Anthologia Hibernica* as the organ for the advocacy of their views, Irish literature, though it found a useful exponent, did not always find a truthful one.

In the Royal Irish Academy, since its establishment, the language, history, and antiquities of Ireland found an echo, and betimes a friend. Its mission was not, of course, to establish schools or form classes for the teaching of Irish; still, as early as 1793 it offered a gold medal for "An Historical Enquiry into the Antient and Present State of the Irish Language; with the Causes and Remedies of the Obscurity of Ancient MSS." Now, long before this time, we had grammars and printed books in and on the Irish language in Roman and Irish characters. Molloy's grammar—"Grammatica Latino-Hibernica nunc Compendiata Romæ"—appeared in 1677, but the modern science of philology was then unknown, and for nearly a century and a-half later received little attention. Other writers of dissertations on, and grammars of, the Irish language in the eighteenth and early part of the present century have followed in the wake of Molloy, and treated our language somewhat in the same style. At the time the Royal Irish Academy was offering a premium, Ledwich or his disciples, in the *Anthologia Hibernica*, were writing thus of their mother tongue:—

"The attempt to compare every known tongue by the standard of the Celtic, the most heterogeneous and corrupt language extant, must ever be esteemed the enterprise of weak intellects. Is this venerable tongue to be suffered to go into total oblivion? By no means; let its scattered fragments be collected carefully; let the canting phraseology of lawyers and physicians be investigated, and a key from these will be formed to decipher the Brehon laws. A good Irish scholar, thoroughly versed in ancient MSS., I do aver would, from the intelligent commentary annexed to these laws, be able in a short time to make a canting dictionary which would render the whole perfectly easy. No other mode can be devised to accomplish this desirable end, and it lies within the compass of modern talents."

What does Canon Bourke think of the above? but it must be recollected it was written between eighty and ninety years since, and written by an Irishman in an Irish publication which was accounted the most respectable and representative of its kind in the ranks of Irish-English periodical literature. If the above extract draws no smile

\* "The Aryan Origin of the Gaelic Race and Language; The Round Towers; The Brehon Law; The Truth of the Pentateuch." By the Very Rev. Ulick J. Bourke, M.R.I.A. Second Edition. London: Longmans, Green, and Co.



from Irish scholars and philologists at the present hour, they must indeed be a hard-hearted race. The above writer was, however, very earnest in his efforts to elucidate the mysteries of the Gaelic language, judging him by his words, for in another article in the same publication he writes thus concerning the Brehon laws:—

"It is a mistake to imagine their elucidation depends on a knowledge of the obsolete Irish language; it rests solely on recovering the law language which the Brehons confined to themselves. I make this assertion with the more confidence from some attempts I have tried in this way, but not sufficient to entitle them to public notice. However, as a small instance of patriotism I will not only communicate my remarks, but make a compliment of five guineas to any one who will give a specimen of his abilities towards recovering the genuine meaning of the Brehon laws."

We would like to know what the above writer's attempts at deciphering "the obsolete Irish language" were like. Grosz, the antiquary, who devoted some labour to the illustration of Irish antiquities, wrote, we believe, a provincial glossary or canting dictionary, and probably this suggested the idea to the writer in the *Anthologia* that something might be achieved in the same direction with regard to the Irish language.

Speculation anent the Irish language and the early colonisation of Ireland was an attractive subject towards the close of the last century and the early portion of the present, and a large amount of literary rubbish was the result, as we can now see; but it was looked on as learned criticism by the general public at the time. Properly speaking, there was no reading public, and newspapers and magazines had but a small constituency, and this was principally composed of the nobility and gentry. The Irish Parliament during its eighteen years of existence gave a great impetus to native trade and manufactures; but while our commerce, art, and architecture rapidly improved during that time, nothing was done for the preservation of the Irish language. True, a member of the Irish Parliament—Henry Flood—made a noble bequest for the establishment and perpetual maintenance of an Irish professorship in Trinity College, but by some informality it lapsed. Had Trinity College established its claim, and had Flood's bequest been carried out in its integrity, vast would have been the benefits achieved for the Irish language. Premiums would be given for the encouragement of it by the production of essays in various fields, and many would have been the printed books and manuscripts obtained. The people, as a body, might not have benefited much at first, except in an indirect way, but eventually they would. Many students would have taken to the study of the language, and original essays and translations would pour from the Press.

The present professorships of Irish in our Protestant and Catholic colleges, as conducted, can never materially help in spreading a knowledge of the Irish tongue. The professors themselves may be good Celtic scholars, and may contribute—as some, if not all, of them have done—to the stock of Irish Celtic literature; but their labours can have little or no effect in preserving and disseminating a knowledge of the Irish language among our people. To do really practical work, the youth in our National and other schools must be acted upon, and even if the Government cannot be got to assist at present, earnestness and work on the part of the people themselves may eventually secure the

support which is now refused. The Welsh are a pattern; let us imitate them. With organisation, a good beginning can be made. The issue of newspapers, periodicals, books, and even ballads, printed in Irish and English, will materially assist the object; but this work cannot be done without organisation and funds.

If the question be asked, "What benefit will it be to me to learn Irish?" more than one answer can be given; and we invite Irishmen to read how Canon Bourke replies to such and similar questions. Possibly there are hundreds of Irishmen in our midst who would not be satisfied with the most cogent reasoning. If the learning of their native language does not mean pounds, shillings, and pence, they cannot understand why they should devote any time to its acquisition. It matters not to them that Englishmen at present have sat down to study our history, language, and laws, and that students from Oxford and Cambridge come to Ireland to learn Gaelic. Still these men pride themselves on being Irish, and descended from the "old stock," and, while being ready to resent an insult to their country, are ignorant of its language or ashamed to speak it in the presence of Englishmen or those of their own countrymen in a superior position in life. "The language is vulgar," quoth they; but the vulgarity here, we must say, is in the individual and not in the language.

Canon Bourke's work is so suggestive of thought that we have been led on to the writing of the above rather discursive article, instead of devoting our attention to his very able analysis of the construction of the Gaelic language, and his philosophic treatment of its Aryan origin. We will return again to the subject, and give some attention also to his chapters on the Round Towers, which are not the least interesting in the volume.

#### ART TEACHING IN DUBLIN.

We give elsewhere some particulars of the proceedings at the annual meeting held for the distribution of prizes to the successful students of the Dublin Society Schools of Art. We regard the results of the past year as the most satisfactory that have followed the labours of any year during the most successful period of the schools' history. The period referred to dates from the time when the productions of these schools (in place of competing amongst themselves only, locally, as had heretofore been the case) entered for the first time upon the broad field of National competition, such new conditions naturally demanding a much higher standard of excellence in the productions of every stage and branch of study, and necessitating a more advanced teaching power. Notwithstanding the increased requirements consequent upon the change referred to, the schools of the Royal Dublin Society have established a reputation in the National contests such as causes them to be regarded as perhaps the most successful of the Departments of the Society. Their success led to the demand for the establishment, many years ago, of an Art Museum for Ireland, and it is highly gratifying that the Government should have recognized the claims of an institution which has performed valuable work influencing National prosperity—labours so successfully conducted as resulting in the elevation of the Society schools to a State establishment, second only to that of South Kensington,

shows how much may be achieved by earnest effort and able teaching. That Mr. Lyne has accomplished so much and performed work so valuable, secures for him the acknowledgments of all who are interested in art advancement in this country.

#### THE TOWN-HALL AND COURT-HOUSE FOR KINGSTOWN.

THE plans furnished for the above building by Mr. J. L. Robinson, architect, were long since approved by the Township Commissioners. After lengthened correspondence with the Board of Works as to a site, that honorable body agreed to grant on easy terms a portion of the ground in occupation of the Government situate at the junction of Crofton and Royal Marine Roads.

In the month of January, 1875, a contemporary published a perspective view of the proposed building, and stated that "this design was prepared for a larger piece of ground than the commissioners [of Kingstown] have since been enabled to procure, and will have to be modified to a certain extent by the architect."

Mr. Robinson originally proposed that the building should be of red brick, with Bath or Portland stone dressings, and to be erected for £8,000. It appears now that the Board of Works insist that the building shall be altogether of stone. The estimate will therefore require to be doubled, and we think the extra money will be wisely expended.

At a meeting of the commissioners on Friday last, Mr. Robinson explained how the estimate should be so largely increased, the Board of Works requiring more elaborate work than at first proposed. He thought that by reducing the internal fittings and dispensing with a tower for the present, the cost might be reduced to £13,000. A motion for the approval of the modified plans, at a cost of £13,000, was carried by the casting vote of the chairman (James Barrett, Esq., J.P.). They were ordered to be forwarded to the Board of Works for approval. The loan of £8,000 was obtained from the Royal Exchange Assurance Company at the rate of 4½ per cent., and now an additional loan will be required on the security of the rates.

#### THE LANDING-STAGE AT BIRKENHEAD.

On the 14th ult. Mr. Graham Smith, A.I.C.E., read a paper before the Liverpool Engineering Society, on the "Design and Construction of the South Reserve Landing Stage and Piers at Birkenhead." This floating landing-stage, which has recently been constructed by the Dock Board, is situate in the Mersey, between the Morpeth and Alfred Dock entrances. It is 352 ft. long and 72 ft. wide, and has been designed partly as a substitute for that which existed in the Low-water Basin, previous to its conversion into a wet dock, and which was devoted to the use of the London and North Western and the Great Western Railway Companies, and to facilitate the coasting traffic coming to that portion of the estate. In sinking the piles forming the piers considerable difficulties were met with, as the sand bank was found to contain numerous large stones and fragments of rock, which had been artificially deposited from time to time, and gradually covered as the bank increased. These stones for a long time resisted all efforts to get the piles down, but ultimately they were sunk to the required depth by the water-jet system. The whole of the undertaking was carried out from the designs and under the supervision of Mr. Lyster, engineer-in-chief, Mr. Graham Smith acting under him in the capacity of "resident engineer." The contractors, Messrs. Emmerson and Murgatroyd, of Stockport, were represented by Mr. Wm. Thomson. The subject was well brought before the meeting, and was illustrated by numerous wall plans and diagrams.



## THE ORIGIN OF THE "SCALP."

THE following interesting sketch of the origin and geological age of the "Scalp," on the borders of Wicklow and Dublin, was given by Professor Hull, F.R.S., the Director of the Geological Survey of Ireland, at the Evening Scientific Meeting held at the Royal Dublin Society on the 19th ult.:—"What the origin of the name was, he was not in a position to say, but he hoped to be able to account for the "Scalp" being there, and to give an intelligible answer to the question that had been so often put, How had the "Scalp" been formed? The answer generally was that it was a gaping fissure caused by some volcanic movement, or that the ground between the two walls of the "Scalp" had fallen in, and so formed a valley. No one that had studied the course of river valleys, however, could doubt for a moment after studying the character of the "Scalp" that it was part of a river valley. This cleft traverses transversely the ridge which stretches from the coast at Killiney by the Three Rock Mountain, Glendoo Mountain, and the ridge dividing the sources of the Glencree and Dodder rivers to Kippure, at an elevation of 2,475 ft. It is, in fact, a ravine of about 325 feet deep, and at an elevation of about 500 ft. above the level of the sea along its bottom, bounded by steep, sometimes precipitous, banks of granite towards the north, and schist at the southern extremity. The ridge which is intersected by the "Scalp" forms the water-shed between the streams which flow into the Dodder on the north, and those which pass into the Shanganagh and Dargle on the south, so that there is scarcely any stream in the ravine itself. The actual water-shed, as the traveller passes along the road which traverses the "Scalp," is reached about 200 yards north of the entrance to the ravine near the school-house, and yet no one who is conversant with the forms of river valleys can doubt that the "Scalp" has been formed by river action, and that a considerable stream, somewhat proportionate to the size and depth of the ravine, originally flowed through it. In his (Professor Hull's) observations, therefore, he must assume that the "Scalp" was the channel of a former river, and that it has been scooped out by river action. If any one denied this he would ask him to explain the formation by any other hypothesis consistent with observed physical facts. The question then arose—What had become of the river which once flowed through it? for surely the little dribble a foot or two in width which now runs through it could not be considered as the sculpturing agent. The answer appeared to him only to be sought for in the restoration of the original stratification of the country, and if they restored the strata as they existed at the close of the carboniferous period they should have to pile up 2,940 ft. of thickness of limestone, soft shale, sandstone, and other easily destructible strata, and then it would be found that the ground to the north would have been relatively higher than that forming the ridge of Killiney and Shankhill. Thus, on the elevation of the whole country into a land surface at the close of the carboniferous period, and assuming a slight slope of the surface southwards, it is easy to conceive that a stream might have commenced to run along the channel in the coal measures directly over the line now occupied by the "Scalp." The great central plain of Ireland was in all probability the seat of a widespread coal formation, which has since been swept away by denudation, with the exception of a few little patches, such as Kilkenny and Slievardagh coal-fields, which have been preserved to us as relics or monuments of more extensive tracts. The period through which the land was now exposed to denudation was immensely extended—ranging downwards through the mesozoic into the tertiary times, and throughout this enormous lapse of time the central plain of Ireland was being denuded of its coal formation, and to a large extent of the lower carboniferous rocks,

which also underwent chemical dissolution from water charged with carbonic acid. It was at this stage he considered the "Scalp" had been cut out of the granite in Silurian schists. During the progress of denudation some districts would be more rapidly stripped than others. The loose beds of shale flagstone, sandstone, coal, &c., of the carboniferous area would be distinguished and carried away by the rains, and by the rivers created by the rains, much more rapidly than the solid granite and tough schists and quartzites of the country to the southwards. In other words, the carboniferous plain became relatively lowered more rapidly than the granite area to the south, and ultimately so much so that the granite and silurian ridge became the water-shed, and the stream, which up to this time flowed through the "Scalp," was diverted from its course, and began to run down towards the position of the valley of the Dodder. His belief was that the river was either the ancestor of the Dodder of the present day, or, at any rate, the ancestor of a tributary. It was, in fact, exceedingly probable that the stream now called the Dodder originally flowed through the "Scalp," and that its present course and direction were due to the change in the elevation of the relative levels of the granite hills and the limestone plain. A former president of the Geological Society of Ireland, Dr. Scouler, had given it as his opinion that the "Scalp" was formed subsequent to the drift or glacial period, on the ground that no vestiges of drift deposits are to be found in the valley of the "Scalp" itself. If this were so, his (Professor Hull's) theory of its vastly more ancient origin would, of course, fall to the ground; but even if it were the case that no drift beds are to be found in the valley, it by no means followed that the "Scalp" was hollowed out after the drift period. The presence or absence of drift deposits was due to a variety of causes, all of which must be determined before they could draw any conclusions from either.

## THE FIRST FREE PUBLIC LIBRARY.

THE following exceedingly interesting particulars relative to that venerable and but little known institution called "Marsh's Library" have been made public. It is the first free library ever established in the United Kingdom, having been founded about the year 1704, by Primate Marsh, when he was incumbent of the See of Dublin. It is built on a portion of the garden of the Old Palace, in Kevin-street, of the Archbishop of Dublin. It is enacted by the Irish statute (6th Anne, cap. 19)—A.D. 1707—that it shall be a free library for ever, and that act incorporates the board of governors—viz., the Archbishops of Armagh and Dublin, the Chief Justices of the Queen's Bench and Common Pleas, the Chief Baron, the Deans of Christ Church and of St. Patrick's, and the Provost of Trinity College, and their successors. In 1865 an attempt was made by the Government to transfer the library from its ancient abode to the Royal Dublin Society, or the building known as the National Gallery, Leinster Lawn, but the late Sir Benjamin Guinness, by his exertions, obtained a reversal of that determination, and, shortly after, that munificent citizen commenced a thorough reparation of the edifice. It was almost rebuilt by him, being faced throughout with cut stone, a handsome porch erected in Guinness-street, and the interior improved and painted. These restorations were—at a cost of some £3,000—completed by Sir Arthur Guinness, and were the more necessary as there are no adequate funds provided for permanent repairs. Sir Benjamin Guinness likewise left an endowment fund producing about £70 for the rebinding, &c., of the books in the library. This library contains, in addition to the collection of the founder, the entire library of the learned Edward Stillingfleet, Bishop of Worcester, which the Primate purchased after the bishop's death in 1699. Some 2,000 valuable

books belonging to the first librarian, the Rev. Elias Bohercan, and 6,000 volumes were subsequently added by the bequest of Dr. Stermo, Bishop of Clogher. There are about 17,000 volumes and 100 rare MSS. in the library. The small emolument derived from lands in the county Meath, the cost of erection, and the site, were all given by the founder, whose remains repose in the neighbouring churchyard, close to the library wall, in which is inserted a stone tablet bearing this inscription:—"Infradormat corpus Narcissi Archiepiscopi Armachani Primatis Hiberniæ—Si plura scire velis, Monumentum in Ecclesia Cathedrali S. Patricii situm consulas."

The Board of Governors, in consequence of their more pressing engagements, and residences at a distance—with the exception of the Dean of St. Patrick's, and occasionally the Archbishop of Dublin—never attend, and the management of the library is practically confided to the present erudite sub-librarian, Dr. Travers. That gentleman is devoted to his duties, and shows with pride to visitors the autographs and notes in various volumes of Dean Swift, and of the other celebrated men who were wont to study in this quaint old library. It is well worthy of a visit. The site has been beautified by the planting of handsome shrubs and trees in the churchyard by Sir Arthur Guinness, and will be further improved by the removal of the old dilapidated dwellings in the vicinity, which have been recently purchased by Sir Arthur Guinness.

The library might be much more frequented if the statute of Anne were amended in such a way as would admit of the addition to, or co-option by the present board of governors, of gentlemen interested in the locality, who would attend the meetings of the board, exert themselves in improving the arrangements, and induce the Government and munificent citizens to give grants of books, &c., or supplement the funds. The addition of good modern works, readily accessible in a thoroughly free library, would prove most attractive and beneficial in this neighbourhood.

## THE ART SCHOOLS OF THE ROYAL DUBLIN SOCIETY.

On the date of our last issue the annual distribution of the prizes obtained by the students of the Royal Dublin Society's Art Schools took place in the Lecture Theatre of the Society's House, Kildare-street, the Lord Lieutenant presiding.

Dr. G. Johnstone Stoney (hon. sec.) gave an historic sketch of the origin and establishment of the Dublin schools, dating back nearly a century and a-half, reviewing on his way the progress made up till the present time, and the position which the schools would in future hold in consequence of the establishment of a Science and Art Museum by the Government.

Lord James Butler (chairman of the Committee of Fine Arts) followed, giving an interesting sketch of Irish artists and their works during the eighteenth century and the present, several of whom were originally pupils of the Dublin School of Art.

Dr. Steele read the report of Mr. R. Edwin Lyne, head master and director of the schools, after which the students who had earned prizes were presented to the Lord Lieutenant, and received the prizes from him.

At the conclusion of the distribution his Grace addressed the assembly. After congratulating all those who had bestowed their labours and energies in advancing the Schools of Art in Dublin, and pointedly alluding to the great success and prominence obtained by the school amongst the Art schools of the United Kingdom, his Grace went on to say—

It appears to me that one of the most important aspects in which we may regard the Art Schools of Dublin, and indeed all art schools, is that which I see is alluded to in the report, and it struck me forcibly while I was reading it, namely, that the object of art schools is to train in a solid and precise manner the eye, the understanding, and the taste,



and to enable students not merely to execute certain works of design, or this or that work of greater or less prominence, but it is to enable students to gain by slow and measured degrees that higher training which will fit them to execute larger and more important works in the future. I cannot conceive anything more important than that view of art schools; and when we come to take a wider view of this subject we are led to see that the intention of all training must be either—in an age like the present—of a practical nature, or of an æsthetic description consulting the taste and the feelings. We have at the present time in the city of Dublin two exhibitions which struck me as being of the greatest possible importance. One is the Exhibition of Paintings of the Royal Hibernian Academy, and the other is the Exhibition of Paintings of the Amateur School of Drawing. The noble lord, who presides over the Committee of Fine Arts, has mentioned the names of artists who have departed from amongst us, but whose works have left a record of their age; and it seems to me that it would not be proper to omit all mention of those living artists now amongst us, and whose works we have had such pleasure and gratification in examining. I find among these the names of Jones, and Burke, and Prittie, and Watkins, and Grey, and I must say that it was with the greatest possible pleasure that I observed those beautiful paintings in the exhibition of amateur artists which have been executed by Miss Currey. We have there the evidence of what may be done in Ireland—of what may be the result of good and efficient training in the schools of art; and it is a matter of the greatest congratulation to all here present, that persons are found giving their energies, their time, and their intelligence, to maintaining, and to promoting the instruction of pupils in these schools of art training. Nature is the great model which is set before us—it is the only model, indeed, in copying which that proficiency can be obtained, which ultimately leads to celebrity. I feel myself that this is a subject upon which as a layman I ought hardly to speak, but at the same time on an occasion like the present it is not inappropriate to allude to some of those dangers which may be encountered in following, or endeavouring to follow, those studies which nature has exhibited to mankind. A too close following of nature will doubtless render pictures hard and stiff. On the other hand a style may be adopted which is too diffusive in its character and does not sufficiently render form and outline. We have before us instances of both kinds of painting. We have instances of that hard and rigid rendering of nature which cannot altogether please the eye; and we have also instances of those attempts at generalisation and of taking in too much of the subject by means of a few strokes, which do not give those qualifications which a more faithful picture would afford. I am reminded of the words of the poet, in which he says that the proper aim and endeavour of the painter should be—

“Hinc vivas educere voces”

—to bring out the living message, and to steer clear between the two extremes of too faithful and rigid a rendering on the one hand, and too diffusive a character of painting on the other. To those who have spent so much time in the study of art, as many of the persons I am now addressing, it would seem almost presumptuous on my part to proceed to any further length in remarks of this nature. But we must remember that this question has a practical aspect; and that is one which, in an age like that in which we live it is impossible to overlook, because the persons who are engaged in the prosecution of those studies have in view not their present gratification, but the avocations and employments in which they may be hereafter engaged. This as a practical view is a most important one; and it is with reference more immediately to it that this school is to be considered. Its object is not merely the production of certain designs, but, as I have already remarked, to educate the taste, the mind, and the eye. That is a very happy mode of teaching, and one which must ensure the greatest success in the long run. If these schools were to be mere schools of design in all probability they would lose half their significance and importance. They are schools which tend to higher objects, and to prepare for higher and more noble art; but those who have been so trained and taught, will, in all probability, be best enabled and fitted to execute those designs which may come into practical manufacture, and will thus be provided with the means of profitable advancement in life. In the exhibitions to which I have already alluded it is gratifying to observe that the painting of pottery has been attended to, and that there are several specimens of pottery of the most interesting character. I am reminded of another exhibition which is open at present, namely, that of Art Needlework. Design in needlework is one of the objects to which the education and instruction given in these schools must

bear special reference, and it is an art which I am happy to say is beginning to revive. At the present time a great stimulus has been given to it in London; and it is encouraging to see the move which has been made in this city of Dublin by the ladies who have given their time and attention to the exhibition to which I allude—an exhibition which cannot fail to have its influence and to leave its mark upon everything connected with the study of Art and the promotion of artistic drawing in every shape. The noble lord, the chairman of the Fine Arts Committee, has alluded to the change which is coming over this society and the schools in connection with it. It is a change which I cannot but believe will, in the long run, be beneficial both to art and science in Ireland. One thing was extremely gratifying to me in the noble lord's remarks—namely, that although in their negotiations with the Government the society may not have obtained the amount of compensation that they thought they were entitled to, nevertheless they have in a large public spirit thankfully accepted the arrangement that has been made, impressed with the belief that it will conduce to the general advantage of the country. I am most happy to see that that opinion prevails. It must be borne in mind that the promotion of art training in Ireland has been mainly due to the instrumentality of the Royal Dublin Society. If art schools have been brought into operation it has been through that society. If a need—if a want—if a taste has been created, it has been through the instrumentality of that society; and it is that want, and that taste, created by the energy of this society in past years, which has now attained such a degree of prominence and importance that the Government could no longer forbear to deal with it. That offspring which this society has nurtured and brought to such a condition of advancement, is now being taken into the public and responsible hands of the Government of the country. This society will have the satisfaction of feeling that whatever money they have spent, whatever sacrifices they have made, whatever time and attention they have given to the pursuits in which they have been engaged, have been devoted to a great public object. The Government have now recognised the necessity of taking up the future care and administration of those objects. The society will still, in its corporate capacity, be able to examine, watch over, and criticise all the acts of the Government in relation to the art museum and schools which are about being taken under its care; and the society will also have the satisfaction of seeing them grow up, increase, flourish, and develop under the parental care of a Government which, far from being insensible, is, I may say, most keenly alive to the interests of art, science, and education in Ireland. Ladies and gentlemen, I beg to thank you most sincerely for the honour you have done me, and the vote of thanks you have tendered to me. I assure you it has given me great pleasure to be here on the present occasion and to distribute so large a number of prizes to competitors who are so well entitled to them; and especially I should congratulate the lady who has gained the first gold medal upon the honour she has conferred on the school in which she has been instructed and upon the country in which she has been born.

The following extracts from the report of the Head Master will be read with pleasure:—

In the National Competition of London the Art Schools of the Royal Dublin Society have again held a leading position—one gold, two silver, three bronze, and one Queen's prize having been gained by the Society's schools. National Competition of 1876:—Dublin, 1 gold, 2 silver, 3 bronze, 1 Queen's prize; Birmingham, 1 silver, 5 Queen's prizes; Glasgow, —; Manchester, 2 silver, 1 bronze, 2 Queen's prizes; Belfast, 1 silver, 2 Queen's prizes; Liverpool, 1 bronze, 1 Queen's prize; Newcastle-under-Lyme, 1 bronze; Newcastle-upon-Tyne, 1 Queen's prize; South Kensington, 3 silver, 9 bronze, 9 Queen's prizes; Edinburgh, 3 silver, 7 bronze, 2 Queen's prizes. The gold medal has this year been won by Miss M. Irwin, who has on former occasions distinguished herself in the National Competition. Of the works forwarded from the 138 Art Schools of the United Kingdom to London, in April last, 1,230 were selected to enter into competition for the national awards; and one-thirty-eighth of that number were studies executed in the Society's schools. We have to deplore the recent loss by death of one who, during many years, studied art in these schools, and who, possessed of the highest ability and taste, secured honour for herself and credit for this institution. She gained numerous leading prizes of the Society and of the Department of Science and Art, and distinguished herself in nearly every branch of artistic study. I refer to Miss Kate Seymour. A set of three original designs for muslins, executed

by Miss Lizzie Lambart, a student of great talent, have been recently purchased by the authorities of South Kensington. Two students of very great ability—viz., Mr. J. D. Tobias and Miss Dora Bradley, have been nominated to free studentships in the school, for a period of one year, by the Department of Science and Art. The number of students attending this school during the year ending July 21st, 1876, has been 524, consisting of 246 males and 275 females—of these, 478 were students who entered at the lower rates of fees—215 of such being males, and 188 females. In addition to the above, 524 students, 44 pupils—total, 568, of drawing classes in external schools in Dublin, paid fees for an examination in drawing held in May last in the School of Art. The following table shows the number of national awards obtained by the Irish Schools of Art since the institution of such awards in 1866:—Dublin Royal Society, 97; Belfast, 40; Cork, 10; Limerick, 1; Clonmel, 0; Queen's Institute, Dublin, 1; Waterford, 0.

The Plasterers' Company of London, having for its object the promotion of Technical Education, as applied to its own special industry, has offered during the past eleven years prizes for modelling and for design to students in the Art Schools and artisan classes in connection with the Department of Art, South Kensington. Messrs. Watherston and Son, of London, have also offered very handsome prizes for designs of a dessert service of plate of £100, £50, £30, and £20. Messrs. Howell and James, of Regent-street, London, offer medals and prizes varying in value from one to fifteen guineas for the best works, being original designs of heads or subjects, landscapes, flowers, or ornaments, by artists or amateurs, to be painted on china, plates, plaques, tiles, &c. It would tend to the advancement of design in connection with industry, and greatly conduce to a more consistent application of the same, were all manufacturers and others concerned, to make it a condition in the indentures of their apprentices that they should regularly attend a school of art to receive such a training in taste as would materially influence their work and increase its value. My thanks are due to Miss Julian, who has been associated with me in the instruction of the female classes of the day schools; to Mr. Robert Walsh, Miss M'Gee, Miss Elizabeth Irwin, Mr. John T. Miles, and Mr. Sylvester Reilly my thanks are also due for the zeal and ability with which they have seconded my efforts. I may here remark that Miss Dora Bradley, who has already been mentioned in this report as having been selected for a free studentship of the Science and Art Department in these schools, has acted during the past year in a very efficient manner as monitor-assistant in the Ladies' Elementary Class.

#### INDUSTRIAL ART.

Mr. Charles L. Eastlake, F.R.I.B.A., in the last of his course of lectures, delivered to the students of City of London and Spitalfields School of Art, dwelt upon the term Industrial Art, and similar terms, to show that the titles were in themselves deceptive and did not convey the idea that in every branch of industry real art might be encouraged. In the present day much so-called love of art was really a full appreciation of the market value of the objects, and this was one of the secret causes of the deterioration of articles of common use, both in their structure and their ornament. When sons worked with their father, the family skill was expended upon the manufacture, but when these were replaced by journeymen, hired servants, zeal and pleasure in the work became less evident or vanished. The rule seemed to be to produce the greatest show with the least trouble and cost. The lecturer also warned the students against mere imitation, and instanced the manufactures of Japan, influenced by the desire to suit the English market, as showing the work done for sale, not for love of art, to be necessarily inferior to older and more loving work. But he urged them to study such forms of ancient work which still survive as useful for domestic purposes, and pointed out how the re-introduction of these would be better than the pushing forward of so-called novelties. That which is pleasant, as giving a sense of repose, is good, hence the feeling produced by the display of chromatic unity such as shown in Gainsborough's “Blue Boy,” and which might and should also be shown in domestic furniture and objects of art work generally termed industrial.



## LECTURES ON ARCHITECTURE.\*

(Continued from page 88.)

CAN we wonder if a revolution such as this has left its mark on architecture? It led naturally first to an indifference towards the old forms of Mediæval art, and then to a hatred and contempt for all that seemed to speak of a yoke that had been once broken never again to be imposed. Such feelings soon manifested their destructive tendencies, and the spirit of iconoclasm was let loose. Destruction and demolition followed in its wake. Fortunately for us, in this country, the native moderation and prudence of the English people prevented the occurrence of extravagances on the scale witnessed elsewhere, and their conservative instincts were readily enlisted on the side of preservation after the first whirlwinds of enthusiasm had somewhat spent their force. We owe to this spirit the exceeding richness of our country in Mediæval remains, which constitute a very mine of art. But, apart from any local limitations, such as were due to the character of particular nations, the movement as a whole went on, and everything was ripe for change in architecture. The direction it was to take was soon indicated by the interest shown in the revival of classical literature. It is not easy to account at first sight satisfactorily for the previous neglect of this subject. The great works of the classical authors had not been lost, and Latin was the language of the Church, understood more or less by all ecclesiastics with any pretensions to education. It is certain, however, that classical literature had become almost forgotten, and that the revival of it in the fifteenth century came upon the world as a startling novelty,—a new discovery,—to be hailed with the enthusiasm which, as we have seen, was ready to welcome all things new. The spirit of the times was thus strengthened and stimulated by the literary revival, and both causes tended to break with the rules and precedents which had heretofore guided our architecture.

With these changes came a development of social wants, and Domestic architecture began to assert its claims. Church building was no longer the chief business of the architect, and indeed, almost ceased for a time to be his business at all. The ecclesiastical edifices which had been left to us seemed to be sufficient for all time, and if they were not suffered to fall into actual decay, no attempt was made to enlarge them, or to increase their number. We know that this feeling extended to a late period, and that the present generation has had its energies tasked to the utmost, in its attempt to cope with the difficulties bequeathed to us by an age of ecclesiastical neglect.

Setting aside, however, for the moment, any consideration of excesses, such as perhaps must always mark every great public movement, we may notice that the age of church building on a large scale appeared to pass away with the Reformation, and that ecclesiastical architecture and influences lost at the same time their predominance. The enlargement of views consequent on the spread of education, the tendencies induced by the revival of classical literature, the nascent importance of science, the gradual uprising of the middle and lower classes,—all tended in one direction, and some of the results to our art soon showed themselves in the increased attention that was paid to Domestic buildings.

In estimating the importance of this movement, you will readily see how completely it altered the duties of the architect. In ecclesiastical work he had positive orders, and well understood precedents, to guide him. Domestic architecture, however, introduced new considerations, and would not suffer the neglect of that condition of usefulness, which constitutes one of those limitations of originality to which the architect must submit. It is from this time that the influence of the laity began to make itself felt. The old ecclesiastical force had spent itself, at least

for a time, and individual tastes came into prominence. A battle indeed there was, and in the edifices of the Renaissance we find columns and entablatures, borrowed from Rome or Greece, in close juxtaposition with mullions, gables, and Gothic tracery. Most of you, probably, are familiar with examples of this mode of work, at Haddon Hall, Hatfield, Crewe Hall, Knole, &c. It constitutes the Transitional style of English work, indicating at once a taste for the new and a love for the old. It marks a period when men began to feel that they had achieved their liberty; that no one had a right to make them afraid; and that they might in consequence direct their energies to the improvement of their estates, the splendour and convenience of their houses, and the welfare of their dependents. No longer compelled to be armed *cap-à-pie* against war or tumult, the ponderous coats of mail become peaceful ornaments of the hall or castle. Swords were left in their scabbards, or were hung up on walls for decoration, and if not literally turned into pruning-hooks, become the protectors instead of the foes of all peaceful industry. While the squire devoted his leisure to the sports of the field, the mistress of the house occupied herself with domestic management, and with her handmaids, executed marvels of patient work in embroidery, tapestry, and the like.

Such was the result of the calm which had followed the fierce storms that had swept over public affairs. The instinct of our people turned then, as now, to country life, and we have evidence in many a stately home how well it was loved and cared for by its founders. Locomotion was not as yet easily practicable. Pack roads, traversed by horses, were often the sole means of communication, and even my lady would have to ride pillion if she desired to visit her market-town. To stay at home was therefore the rule, and *home* was consequently beautified, not only by handsome architecture, but by all the means at the disposal of its owner. We owe to such circumstances the quaint formal gardens, the well-kept bowling greens, the avenues and mazes, such as exist, for example, at Hatfield. Hospitality was not forgotten, and we find great quadrangles surrounded by quarters for retainers; also stables, not only extensive, but often ornamented in an elaborate manner. In fact, a great man's house in the time I am speaking of was an example, in a small way, of a kingdom, and possessed an individual importance of which it is difficult to form an adequate idea in the present day.

I have not, however, called your attention to these buildings because of their social importance, although such considerations must always possess interest for the student of history; but I wish to suggest to you their bearing on originality in architecture. They do not, as we have seen, altogether break with the past, but, at the same time, they show no slavish regard for precedent. New principles are admitted, but the new work is based on development rather than destruction. The chapel, for example, is recognised, and forms an integral part of the structure. If it be no longer devoted to the old ritual, it clings to the old shapes and usage, and stands forth as a witness that the ruling spirit in our land has ever been one of reform and not of revolution. If we can trace evidences of this spirit in the results of the fierce conflicts which have excited the minds and passions of men, it would be strange if we found no signs of its influence on our architecture, which had not yet ceased to be a truthful exponent of the manners and customs of its age.

But such conservative instincts did not altogether suppress originality. Our old English mansions have a character all their own, and reflect with fidelity the changes which I have endeavoured to indicate. They are evidently dwelling-houses of various degrees of magnificence, according to the wealth, rank, or position of their owners. They cannot be mistaken for anything else,—they are not like churches or castles, although they may possess features borrowed

from both. They are evidently truthful, and therefore pleasing, even when, as often happens, their actual details are not in the best taste. They are thus a good example of that originality of architecture which may be sought in the application to new circumstances of knowledge gained from experience. Rightly studied and understood, they contain valuable lessons for ourselves. While giving evidence of originality and beauty, they do not kick against the pricks of that law of usefulness which must be obeyed by the architect. But, arising naturally from the requirements of their owners, they frankly recognised that the first necessity of a building is that it shall be suitable for the purpose for which it has been erected.

In later times, this important truth has been too much obscured, and reproach has been cast on architecture accordingly. The architect, while ever striving to elevate his art, so as to refine and purify the taste of his time, must always remember that his work is for use as well as for show, and that it must not be undertaken to glorify himself, but to serve his fellows. With the experience of the world before him, he must not be satisfied with the evanescent reputation which waits upon those who, by dragging to light disused forms of architecture, raise a spurious claim to originality. He must be content to apply his art to existing needs, rationally, carefully, and lovingly; and in so doing, may find the means of endowing his work with an interest which will confer on it a real claim to be truly original.

Let us now consider the bearing of another of the limitations of originality, to which I have referred. I allude to the question of materials. Here the architect comes in contact with difficulties of a very uncompromising sort. He is often tempted to envy his brethren of the brush. Not only is all nature open to the painter, as his guide and instructor, but he is also unfettered by material considerations. The architect, on the other hand, deriving but limited and indirect assistance from nature, can do nothing of himself, but must trust to others, not only to enable him to call his creations into being, but also to manipulate the very materials necessary for this purpose. He must study the characteristics of stone, timber, bricks, iron, and other matters before he can even know how to begin to design, and his projects must vary according to the materials to be employed. This is, as you will readily perceive, a limitation to originality, but it is a limitation which has ever been accepted by all really good architects.

The Greeks are supposed to have evolved these columnar designs of temples from an older timber construction. If so, however, they have, in the spirit of true artists, avoided the error of actual copying, in one material, forms only suitable to another. The proportions of the parts of a Greek temple are beautifully appropriate to the material used, and while in a wooden construction they would doubtless have achieved lightness and elegance; their colonnades of marble express the qualities of strength and repose, which satisfy us at once as the perfection of art under the circumstances of the case.

When the arch became subsequently employed by the Mediæval architects, similar principles were observed. Vaulted roofs were the favourite mode of covering spaces, and the spans of the arches had to be regulated by the nature of the materials available. Arches could only be practically built within certain limits of size, and the thrust of such arches had to be carefully provided for by the erection of buttresses, turrets, and similar features. In this respect the Northern architects showed pre-eminent skill. The beautiful curves of their groinings are not interfered with by ties or other visible support, and the necessary buttresses which exist outside contribute in no small degree to the external beauty of the buildings. Even where these buttresses are exaggerated, they are not without an effective character, as you may see, for example, at Notre Dame, Paris, where the buttresses around the choir have a

\* By Professor Barry. First lecture. Delivered at the Royal Academy on Monday, February 26th.



somewhat undue influence upon the other architectural features of the building.

In the South, the Gothic architects of Italy showed less constructive ingenuity. Ignoring buttresses, they sought other means of combating the thrust of their arches. They found it in a system of iron ties, which connected the columns with each other, and with the walls, and prevented the arches from spreading. This expedient, faulty as I conceive it to be, has attracted admirers, and even some imitators; but, in my judgment, it cannot be approved by the thoughtful critic. It brings evidently under notice the defect which attaches, more or less, to all arched buildings,—their quality of unrest. It gives, therefore, an idea of imperfection, destructive of confidence in the solidity and stability of the structure. We may, perhaps, accept it as inevitable, where it is found; but it is not a feature to be commended or imitated. It is, however, a striking example of that limitation of the architect's power by materials to which I am at present referring.

The same principle of suiting design to materials guided the architects of our Gothic wooden roofs. In these there was naturally greater latitude for freedom of design than with the more intractable material of stone. We, therefore, find in such roofs an infinite wealth of ornament in tracery, framing, and carving, from the palatial roof of Westminster Hall to the covering of an humble village church; but always designed on principles befitting wooden construction.

As with the roofs, so with the fabric. When stone abounded the mason was master; when stone was scarce, the carpenter or the bricklayer displayed his art. We have some fine examples of brickwork in our country, as at Costessy Hall, in Norfolk, and elsewhere. In Holland and the Low Countries, and parts of Prussia, brickwork was carried to great perfection, and has recently attracted much notice from ourselves. You will find, by a careful study of its forms, how naturally the latter have sprung from the materials used. The massiveness of stonework is exchanged for a multiplicity of parts, small in themselves, but often exceedingly rich in effect. Tracery, on the other hand, is clumsy, or altogether absent, and we thus miss an important element of design, which is, however, to some extent compensated by the varied and picturesque outlines of chimneyshafts, corbels, and gables, stepped or otherwise.

Progress in brick architecture, in modern times, was long hindered by an excise duty levied on bricks, which practically controlled their manufacture, and hindered improvement. The evil of such things lives after them, and though the duty has been abolished for many years, its depressing influences have remained until very recent times. Now, there are evidences of a greater freedom in the use of bricks of various forms and designs. There is consequently a greater field for the exercise of originality of design; but in availing himself of his liberty, the architect must take care that his liberty does not degenerate into licence, and not therefore try to execute in brickwork details borrowed from stone or marble architecture.

With brickwork is closely allied terra cotta, which may, in fact, be described as high-class brickwork. It is possible that the use of this material may become more common with us than is now the case. If you wish to see the elaboration of which it is capable, you have a splendid specimen in the great Hospital at Milan. The terra cotta of North Italy is generally very good, but this is perhaps the most elaborate specimen of its use. We find in it mouldings, festoons, tracery, and other details which we are accustomed to see worked in stone, all carried out in the most beautiful manner in red terra cotta.

Nevertheless, it may be doubted if such an employment of terra cotta be founded on true principles. From the necessities of its manufacture, terra cotta must consist of many pieces, and in them truth of execution cannot be obtained, in the case of mouldings, arches, columns, and the like. For the more decora-

tive portions, such as the festoons of flowers, enrichments, and the parts generally described as carving, terra cotta has some advantages; but these it must be remembered, are of a mechanical nature, and will not allow the moulded and burnt clay to compete on equal terms with the life-giving touches of the sculptor's chisel. The general effect of a building, where terra cotta has been freely used for the general features of its architecture, may often please at a distance, but it will seldom be found to gain on a closer inspection. The spectator then finds that the mouldings are coarse, untrue, and badly jointed, the construction often faulty, while the ornaments, by much repetition, cease to interest and please.

The value of terra cotta as a resource for the architect is, however, so great, that it is well worth his while to study its essential qualities and regulate his designs accordingly. If it be rarely desirable to adopt it as the framework of the building, it may frequently be effectively and economically employed for subsidiary details; and when combined with brickwork this is both pleasing and appropriate. In the difficulties of its application we find another instance of that limitation of architectural originality by materials of which I am now speaking. The architect must do what he can, not what he will.

Before leaving this part of my subject I wish to add a few words on the use of iron in our buildings. Iron has, as you know, been used more or less in all but the most primitive times; but it has been reserved for the present generation to witness its application on a vast scale. It was formerly employed as an aid to the carpenter and builder; it now frequently supersedes him altogether. It covers huge spans; it bridges mighty rivers. It forms our roads, and furnishes us with floors and roofs. It is, in fact, the slave of our constructors, and will do their bidding in a great variety of ways.

Notwithstanding all this, iron is a great difficulty to the artist. The architect is glad to take advantage of its constructional assistance; but the application to it of artistic design, to make it a thing of beauty, is a problem hard to solve. Our studies of art are based on examples of the pre-iron age, and it is not easy to take a new departure and to treat what may almost be termed a new material in its bearing on architecture on new principles appropriate to its nature. This, however, must be done, if iron is to enter effectively into architectural design; and we may be sure that as men have now discovered and appreciated the gain which iron has brought to them, they will not easily surrender it. The world will not stand still for architects any more than for others, and if we do not avail ourselves of the materials at hand others will certainly do so, and the great works of the day will develop more and more of an exclusively engineering character.

While architects have been restoring, engineers have been inventing. Greek temples, Italian palaces, and Gothic churches have risen, on the one hand; while, on the other, we find huge and ugly railway stations, roofs of unprecedented span, and bridges till now impossible. If the former class possess beauty, more or less worthy of their predecessors, whose traditions have inspired them, the latter may claim that they at least owe no filial allegiance, but indicate a development of actual originality.

In the meantime, it may be well to observe, by way of caution, that the use of iron on an extended scale, for constructional purposes, is too recent for us to repose a perfect confidence in its permanency. We know by experience what reliance may be placed on timber, stone, and brick; but the gradual deterioration of iron is still an unsolved problem. Depending, as it does, on artificial protection, we are at once confronted with the difficulty of renewing such protection in concealed positions. I saw but recently two pieces of iron which had been hanging up in an uncovered yard for twenty years. One

piece had been protected, and the other left in its natural state. The piece of unprotected iron had become one-third less than the size and weight of the protected specimen; and knowing, as we do, how often iron is employed in inaccessible positions, this experience does not lessen the anxieties we must naturally feel as to its stability and permanence in such cases.\*

I might go through the list of materials with which we have to deal, but I think I have now said enough to show you how varied and great are the limitations imposed upon the architect in search after originality. He has not only to consider carefully the peculiar qualities, the genius, so to speak, of the inanimate matter to which he has to communicate the life-giving breath of art; but he has also to be careful that his work shall not be deficient in the less artistic, but not less important, matters of stability and permanency.

It may seem to many that an architect is so much the master of his work that he may fairly be held strictly accountable for all defects, whether of originality or of other things. The world is now listening for the decision of an absolute monarch, on whose individual will appear to depend questions of peace and war, of momentous importance to millions of people. Here, at least, appears to be unlimited power. Greater knowledge leads to a clearer perception of the inaccuracy of such judgments. The despot is, after all, often the mouthpiece of others, the agent of some national sentiment which sweeps onward with the force of a torrent, and would overwhelm all obstacles. So, to compare great things with small, it is with ourselves. Those who follow the profession of architecture in these days know well how false is the notion of an architect's complete responsibility for designs executed by his orders. He practises an art which cannot find expression except by the will and co-operation of others. He may find the skill, the intelligence, the genius, but all are useless till some one else will provide the means. From the commencement to the end of the work he has to contend against difficulties, and is fortunate if he is able to surmount them without seeing his designs curtailed of their fair proportions. Of course, there are limits to such restraints, beyond which no artist with proper self-respect will consent to be driven; but if some of our irresponsible critics would give an occasional thought to these things, their views on our art, and their opinions of architects, might sometimes undergo a change which would render them more appreciative without making them less just.

We see, therefore, that a modern architect, in carrying out his art, has to take into account at least three considerations from which his painter brethren are free. They may indulge without stint their glorious visions. He is bound down to the practical, and, before he can commence his design, must see that it will serve its purpose of usefulness; that its materials are suitable, both for artistic expression and for wear and tear; and lastly, that its cost shall be kept within carefully prescribed limits.

On other numerous conditions which branch out from these heads I will not now dwell, though they range from a scientific study of the laws of health to the efficiency of a fastening. Our highly-organised and artificial mode of life in the nineteenth century is attended with complications, from which the architect of old was free, but with which he must now grapple, and on which he

\* Two pieces of iron cut from the same plate, of equal superficial dimensions and thickness, were, in 1850, hung in an exposed position; one piece having been galvanised, the other being in its ordinary condition. The results of this experiment at the present date are as follow:—

The ungalvanised iron is about 1-8th of an inch less in thickness than the galvanised, and about 15½ oz. less in weight, the respective dimensions and weights of the two plates being at present—

Galvanised 9½ in. by 3½ in. by ⅝ in., weighing 3 lb. 1½ oz.  
 Ungalvanised 9½ in. by 3½ in. by ⅝ in., weighing 2 lb. 2 oz.  
 Unfortunately, the original weight and thickness of the iron were not recorded, but to all appearance the galvanised plate retains its full thickness and weight.





IRISH TEMPERANCE LEAGUE BUILDINGS, LOMBARD STREET, BELFAST.  
JOSEPH C. MARSH ARCHITECT, 103 DONEGALL STREET.

Photo taken by The City Printing Company 21 William St Dublin



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must bring his art to bear. He must not chafe against such difficulties, but must conquer them, and in them he may sometimes ultimately recognise his best friends, as having led him onwards in the path of a true originality.

The saying is often quoted that the best definition of genius is "a tremendous capacity for taking trouble," and without subscribing absolutely to this dictum, I cannot impress too strongly on young architects the necessity of attention to details. In a perfect architectural work nothing is a trifle, and no amount of *soi disant* originality will atone for bad proportions, badly contoured mouldings, and the like. Completeness and attention to little things are necessary to the production of all great works, and I cannot, I think, do better than quote here a piece of advice recently given by the veteran Emperor of Germany to his grandson, on the occasion of the entry of the latter upon a military career. His Majesty, while pointing out the importance of discipline and zeal, declared emphatically that "in the appreciation of what might appear to be a trifling matter was to be found a guarantee for the performance of great things." This counsel is as valuable to the architect as to the soldier, for we, like him, must march with the times.

Not that we can afford to despise the wisdom of our ancestors. It is doubtless well that we should study antiquity in a reverent spirit. Buildings which have received the admiration of thoughtful men for successive ages are not to be dismissed with the shrug and nonchalance of well-satisfied ignorance. In examining such works, commence by the conviction that you have much to learn. They may, perhaps, in some cases, be opposed to your own favourite ideas of art, whether these be Greek or Mediæval, but you may be sure that they will teach much to those who come to them in a proper spirit. Modern work lacks of necessity the "cachet" which the approbation of ages alone can give. Do not believe, therefore, that careful study of admitted masterpieces, followed under proper conditions, will render your own work, when you are called on to compete with them, less effective and original.

I have on former occasions warned you against the snares and pitfalls of a slavish imitation, and you will remember that as a child develops new wants on his way to manhood, even so do successive ages present to us diverse and more complicated requirements, as the world grows older.

The architect, while learning from antiquity, must not bury himself in a dreamy past; he must bear his part in the existing activity of the state of things around him. Accepting forms which have already prevailed as the alphabet and language of his art, it is for him to give them an originality of expression and development which shall be beautiful as well as reasonable. If he have the gift of genius, he will not lack opportunities for its display; if he possess great inventive skill, it will find a vent, even in spite of the limitations which, as we have seen, surround him.

Genius, however, is the Divine gift to a very few. It cannot be learned or communicated. Must the many, therefore, despair? Not so long as there is a firm determination to labour, a fixed resolution to do our best. If great opportunities for the display of architectural genius are not likely frequently to occur, there is still plenty of work in the world for the architect to do; and in carrying it out faithfully, to the best of his power, he will often experience a development of the latter akin to the originality of genius itself. The problems submitted to him may appear small and mean, as compared with those of the builders of olden time, but to be called upon to take his part in the social advancement of his day is no light privilege, and in bringing to bear upon seemingly little things the refining influences of art, he may teach, as well as practise, the sublime lesson, that there is nothing common or unclean.

## ADVERSARIA HIBERNICA.

## LITERARY AND TECHNICAL.

"HOLINSHED'S Chronicles" are a curious compilation, particularly those relating to Ireland. His volumes are now rather scarce, and what he has written of men and places is more often quoted at second-hand than from the original source. Of Holinshed himself very little is known, save that he was an Englishman possessed of respectable learning in his day, and that a considerable part of his life was devoted to travelling over the country obtaining material, and in compiling his "Chronicles." Whether Raphael Holinshed belonged to any other profession than that of a chronicler or a writer of annals, we know not. His works were first published in two volumes in 1577, and again in 1587 in three. The date of his birth is uncertain, but he died somewhere about 1580. The *Descriptio Hiberniæ* of our native writer Richard Stanyhurst, who was born in this city in 1547, where he died in 1618, was translated into English, and included in the edition of Holinshed's "Chronicles" (vol. ii.) 1586.

In mentioning the greens and open spaces in Dublin, Holinshed, in his description of the old city, goes on to relate some odd particulars anent Oxmantown or Ostmantown, the locality of the present Blue Coat Hospital. We shall cite the old chronicler's description in his own orthography:—"St. Stephen's Greene, Haggling Greene [Hoggin], the Steine, Ostmantowne Greene.—In the further end of this field is there a hole commonlie termed Scald-brother's hole, a labyrinth reaching two large miles under the earth. This hole was in old time frequented by a notorious theefe named Scaldbrother, wherein he would hide all the bag and baggage that he could pilfer. The varlet was so swift on foot as he hath eftsones outrun the swiftest and lustiest young men in all Ostmantowne, mauge their heads bearing a pot or pan of them on his shoulders to his den. And now and then in derision of such as pursued him, he would take his course directly under the gallows, which standeth verie nigh his cave (a fitt sign for such an onne), and so being shrowded within his lodge, he reckoned himself cocksure, none being found at that time so hardie as would adventure to intangle himself within so intricate a maze. But as the pitcher that goeth often to the water, cometh at length home broken: so this lustie would not surcesse from open catching, forcible snatching, and privie prolling till time he was by certaine gaping groomes that laid in waite for him intercepted, fleeing towards his couch, having upon his apprehension no more wrong done him than that he was not sooner hanged on the gallows through which in his youth and jollities he was wont to run. There standeth in Ostmantowne Green a hillocke, named Little John his Shot. The occasion proceeded of this. In the yeere one thousand one hundred and nine, there ranged three robbers and outlaws on England, among which Robert [Robin] Hood and Little John were cheefeteins, of all theeves doubtlesse the most coveteous. Robert Hood being betrayed at a nunnerie in Scotland called Bricklicke, the remnant of the crue was scattered, and every man forced to shift for himselfe. Whereupon Little John was faine to flee to the realme by sailing into Ireland, where he sojourned for a few daies at Dublin. The citizens being doone to understand the wandering outcast to be an excellent archer, requested him hartlie to trie how far he could shoot at random: who yeelding to their behest stood on the bridge of Dublin [the Old Bridge or first-built bridge over the Liffey], and shot to that mole hill, leaving behind him a monument, rather by his posteritie to be wondered, than possible by any man to be counterscored. But as the repaire of so notorious a champion to anie countrie would soone be published, so his abode could not be long conceald, and there to eschew the danger of lawes, he fled into Scotland, where he did [did] at a town or village called

Moraui [Moray]. Gerald Mercator, in his *Cosmographie*, affirmeth that in the same towne the bones of a huge and mighty man are kept which was called Little John, among which bones the hucklebone or hip bone was of such largeness as witnessed Hector Baetius that he trust his arm through the hole thereof. And the same bone being suted to the other parts of his bodie, did argue the man to have been fourteen foot long, which was a pretty length for Little John. Whereby appeareth that he was called Little John ironecollie, like as we terme him an honest man whom we take for a knave in the graine."

There is truth and fiction blended in the above extract from Holinshed. Robin Hood and his followers fled to Ireland in the reign of Richard I.; and Hanmer in his "Chronicle" tells us that Little John, who followed his master to this country, "is said to have shot an arrow a mile and a great deal more." Joseph Cooper Walker, the antiquary, in one of his notes to his "Memoir on the Armour and Weapons of the Irish," thus takes Dr. Hanmer to task for his assertion:—"In this relation the doctor not only evinces his credulity, but displays his ignorance of archery, for the ingenious and learned Mr. Barrington, than whom no man can be better informed on the subject, thinks that eleven score and seven yards is the utmost extent that an arrow can be shot from a long bow." Mr. Walker also refers to the tradition existing of Little John shooting an arrow from the Old Bridge to the present site of St. Michael's Church (now the Synod Hall), a distance perhaps not exceeding that mentioned by Barrington; and we have it further stated that poor Little John's great practical skill could not save him from an ignominious fate, as it appears from some records of the Southwell family that he was publicly executed for robbery on Arbour Hill, Dublin.

*Apropos* whether the notorious thief Scald-brother mentioned by Holinshed, as frequenting a hole or labyrinth two miles under, is a myth, or a fact, the reader must conjecture. When Holinshed visited Ireland in the sixteenth century, he picked up the story, with other strange ones, handed down by tradition. Doubtless in Dublin, as in other places, there are subterranean passages existing at some depth under the soil, leading from one particular locality to another, and constructed centuries ago in troublous times. There have always existed traditions in this city concerning one or more of these passages. A very general belief existed formerly that a subterranean arched passage extended from George's-hill, stretching across under the Liffey, and connecting a monastery on the northern side with Christ Church on the south. What gave colour to the belief was the existence of crypts and underground passages still to be seen and traversed under the timber yard of the late Mr. Bayly, George's-hill. Another tradition has it that an underground passage extended from Mary's-abbey (the ruins of which exist under or near the street of that name) to Christ Church Cathedral. Future possible excavations may reveal these passages, if they really exist, and there are some reasons for believing that some of the old ecclesiastical edifices in Dublin were connected by underground passages. Supposing for a moment that an arched passage of masonry connected Mary's-abbey or the old Dominican priory that existed on the site of the Four Courts with the cathedral on the opposite hill, it would argue the possession of wonderful engineering and constructive ability among the natives of this country long centuries ago. The tunnel should somewhat suddenly dip down under the Liffey from the north side, and then mount a steep incline under Winetavern-street. We do not believe that such a passage or tunnel exists, although its construction was quite possible centuries ago. We only refer to the matter in consequence of a tradition long existing upon the subject, and traditions are not to be altogether discarded, as they often afford clues to remarkable discoveries.



In the first written play of our native dramatist, George Farquhar, brought out at Drury-lane Theatre in 1698, entitled "Love and a Battle," there are some racy, though rather indelicate scenes and passages, viewed in the light of the present day, when morals and manners are more veiled, but possibly not more pure in reality. Roebuck, the hero of the piece, is an Irish gentleman of a wild roving disposition, newly come to London to carve his fortune, full of poverty, but brimful of animal spirits. The picture may have been intended by Farquhar for himself. The play, as a whole, is full of life and character, having young squires, ladies of fortune and in love, maids, mistresses, poets, dancing masters, fencing masters, servants, book-sellers, bailiffs, beggars, porters, masques, attendants, &c., &c.

We give the concluding passages of the play on an account of an allusion to an Irish entertainment, in which the women and the men are represented as being dressed after the "Fingalian Fashion." Perhaps some of our readers will be able to throw light on this fashion, and say whether any relic of it still exists in Fingal:—

*Enter Lucinda, Leanne, and Pindress.*

*Luc.*—You have told me wonders.

*Leanne.*—Here are these who can testify the truth. This gentlewoman is the real *Mr. Mockmode*, and much such another person as your dream represented.

*Roeb.*—I hope, madam, you'll pardon my dissembling, since only the hopes of so great a purchase could cause it.

*Luc.*—Let my wishing you much joy and happiness in your bride testify my reconciliation, and at the request of your sister, *Mr. Lovewell*, I pardon your past jealousies. You threatened me, *Mr. Lovewell*. I pardon your past jealousies. You threatened me, *Mr. Lovewell*, with an Irish Entertainment at my wedding. I wish it present now, to assist at your sister's nuptials.

*Leanne.*—At my last going I sent for 'em, and they're ready.

*Love.*—Call 'em in then.

[*An Irish Entertainment of three men and three women dressed after the Fingalian Fashion.*]

*Luc.*—I must reward your sister, *Mr. Lovewell*, for the many services done as my page. I therefore settle my fortune and myself upon you, on this condition, that you make over your estate in Ireland to your sister and that gentleman.

*Love.*—'Tis done, only with this proviso, brother, that you forsake your extravagancies.

*Roeb.*—Brother, you know I always slighted gold,

But most when offered as a bribe.

I scorn to be bribed even to virtue,

But for bright virtue's sake I here embrace it.

[*Embracing Leanne.*]

I have espoused all goodness with Leanne;

I am divorced from all my former follies.

Woman's our fate—wild and unlawful flames

Debauch us first, and softer love reclaims.

Thus paradise was lost by woman's fall,

But virtuous woman thus restores it all.

[*Exeunt omnes.*]

Farquhar spent some short time in Trinity College, but was obliged to leave before completing his studies; and when he took to the stage he continued for two years in connection with Smock-alley Theatre. While in Dublin he had good opportunities of knowing and acquainting himself with the customs that existed among the peasantry of the district of Fingal. These were the days of the wooden ploughs, and of the alleged practice of ploughing by the tail. Farquhar, in the play under notice, or in some other one, says (if we remember aright), that Irish horses plough best by the tail. In our juvenile days there was a rhyme current expressive of the mode in which the peasantry in the Fingal district viewed a fire upon their domestic hearths. We forget the exact lines, but the first line of the couplet ended with the word "Fingal," and the second went on to say:—

"When the wad's out the fire is out all."

There was formerly a sort of dialect peculiar to Fingal, and among the agricultural population there are still many characteristic words, from the odd way they are pronounced. Within the last century farming has greatly improved in the district; the best modern

implements and appliances have been utilised, and the value of land greatly increased. Fingal is most historic ground, and has a history, civil and ecclesiastical, worth writing.

H.

### THE TRANSMISSION OF MOTIVE POWER TO DISTANT POINTS.\*

WITH a view of determining the circumstances under which one system would be preferable to another, data were given respecting the various methods of transmitting motive power. Water pressure was referred to in the first instance, and Sir William Armstrong was recognised as the originator of the hydraulic system in its present wide field of application. An extension of the system to towns on the co-operative principle was advocated, and works were described which had recently been carried out by the author at Hull, under an Act of Parliament, the first of the kind. In this case water-pressure had been laid on to several of the river-side streets, to supply wharves and warehouses where hand-power had heretofore been chiefly used. The Hull Dock Co. was one of the first consumers of the power, to work cranes and appliances at the south side of the Queen's Dock. Two pairs of 60-h.p. engines supplied the power, space being provided for further engines to meet any extension of the system. Observations to ascertain the useful effect of the engines and the accumulators showed an efficiency of 76 per cent., the loss in the pumps being 5 per cent. The rate for the supply of water-power at Hull was under 4d. per ton for a lift of 40 ft.

From the practical rules which governed the flow of fluids in pipes, it was clear that water power was capable of transmission with but little loss. In the machines themselves the useful effect was as high as 90 per cent. in direct-acting apparatus, and as low as 50 per cent. in cranes with great multiplying power. Detailed particulars were given of the working of the hydraulic system at various places, and with pressures in the main ranging from 600 lbs. to 780 lbs. per square in., 80 per cent. being taken as the efficiency of the water pressure after delivery into the main, and 15 per cent. being allowed for interest and depreciation, the cost at those places was:—

	d.	
Albert Docks, Hull ...	1.12	per 100 foot-tons.
Cotton's Wharf (maximum) ...	1.89	"
Cotton's Wharf (minimum) ...	0.70	"
Great Western Railway, Paddington ...	1.10	"
Swansea Docks ...	1.04	"
St. Katharine Docks ...	1.49	"
London Docks ...	1.21	"
Victoria Docks ...	1.18	"
Mean ...	1.22	

The other chief methods of transmitting power, referred to in this communication, were steam, compressed air, shafting, and ropes.

In conveying steam to a great distance, although loss of power occurred through condensation, yet, where the pipes were properly proportioned and protected, no appreciable loss had been found in the pressure at a distance of 1,000 ft. from the boiler. The Lime-street Tunnel of the Liverpool and Manchester Railway, having a mean gradient of 1 in 92, was for many years worked by stationary engines, supplied with steam from boilers situated at a distance of 448 yds. Where steam cranes were kept continuously working, the cost varied from 0.61d. to 2d. per 100 foot-tons, but where the work was below the full capabilities of the cranes, it had, in two instances, reached 6d. and 12d. per 100 foot-tons.

As regarded the application of compressed air, the calculations of M. Paul Piccard showed that, for pressures of from 1 atmosphere to 10 atmospheres, the efficiency, when the air was not worked expansively,

but was admitted for the whole of the stroke, varied from 100 to 39.1, and that, taking into account the efficiency of the machines themselves at 70 per cent., the compounded efficiency was about 50 per cent., although in practice it rarely exceeded 30 per cent. Professor Rankine had asserted that the loss of power seldom amounted to less than from 65 to 75 per cent.; while Dr. Siemens had stated that the attainable limit of the useful effect of compressed air was about 50 per cent. of the power exerted in compression. Compressed air had been employed for underground haulage at Ryhope Colliery, in Durham, by Mr. W. F. Hall, where the cost had been 0.97d. per ton, exclusive of the ropes, which, if allowed for, would raise the cost to about 1½d. per ton. It had also been used to work coal-cutting machines at Messrs. Baird's Works, at Gartsherrie. In this case 2½ cubic ft. of steam, at 40 lbs. pressure, gave 1 cubic ft. of air at 50 lbs. pressure. Compressed air had been used since 1864 in the shops of Messrs. Eastons and Anderson, at Erith, where the consumption of coal necessary to produce a given quantity of compressed air was found to be about 69 per cent. more than to produce the same quantity of steam at a like pressure. The application of compressed air by this firm to work capstans and for opening gates and sluices at Portsmouth Dockyard was also alluded to, although the results were not yet known. In concluding this section of the paper, the trials made to apply compressed air to work tram cars, by M. Mekarski, in Paris, Major Beaumont, M.P., at Woolwich, and Mr. Scott Moncrieff, in the Vale of Clyde, were referred to.

As regarded the transmission of power by shafting, &c., the results of several experiments and calculations showed the loss to be from 32 to 37 per cent.

The application of ropes as a means of transmitting power at Oberursel, near Frankfort-on-the-Main, at Logelbach in Alsace, at Schaffhausen-on-the-Rhine, and at Fribourg-on-the-Saane, was next described. The loss of power in transmission by a single wire rope was estimated to be about 6 per cent. It had been stated that the cost of ropes was only 1-15th that of an equivalent amount of belting, and only 1-20th that of shafting. The wear and tear of ropes, together with the necessity of avoiding steep inclinations where the distances were long, lessened the advantages of that system. On the other hand, the loss of power in transmission by ropes varied only as the velocity, whereas either by compressed air or by water the loss due to friction increased as the square of the velocity. The application of rope gearing to transmit the power from the prime mover to machinery in a factory, in substitution of toothed gearing, was also mentioned.

In reviewing the several systems, it was pointed out that the loss in transmitting air was greater than that of water, owing to the volume of air, at 40 lbs. to the inch, requiring to be 17½ times greater than that of water at 700 lbs. to the inch, to convey the same power. Generally it was remarked that compressed air might be adopted with advantage to mining and tunneling operations, notwithstanding the small useful effect obtained, as it enabled boilers and underground steam-engines to be dispensed with, thus diminishing the risk of explosion, and aided ventilation. Compressed air also tended to the greater employment of labour-saving appliances, the introduction of which was productive of the double advantage of dispensing with manual labour and of enabling underground operations to be carried out more expeditiously, resulting in a quicker return on the capital sunk in such undertakings. Systems of power co-operation, similar to that carried out at Hull, might advantageously be established to effect a better conservation of motive power. At present, independent establishments were maintained to work the machinery and appliances, in most cases intermittently. By adopting power co-operation the expense of

\* By Mr. George Robert Stephenson, President. Read at meeting of the Institution of Civil Engineers, London, on the 13th ult.



production would be spread over many consumers, like the ordinary gas and domestic water services. A comparison of the various systems showed that there were circumstances to which each was suitable, and that as these did not admit of being dealt with always on the principle of economy, but rather of appropriateness, each case must be decided by the conditions governing it. Where, however, the work to be done was intermittent, as in the case of cranes and dock work, the hydraulic system, on the ground of speed, safety, steadiness, and general convenience, was considered by the author to be superior to any other.

### GRETTON VILLAS, BLADON PARK, BELFAST.

MR. WILLIAM BATT, ARCHITECT.

BLADON Park is situate a short distance from the borough boundary, and affords many eligible sites for first-class villas. Those illustrated in our last issue are being erected for Robert Atkinson, Esq. They are not far from the public road, on a well-elevated site commanding a fine view. The fronts will be faced with best perforated red brick, having arches and bands of blue Staffordshire brick. The interior fittings will be yellow and pitch pine, stained and varnished. A handsome entrance lodge has just been completed, to harmonize with the villas, from designs by the same architect.

### IRISH TEMPERANCE LEAGUE BUILDINGS, BELFAST.

THE new building recently commenced in Lombard-street is intended as the head quarters of this now powerful organisation. Only a few years since it occupied a single back office in a neighbouring street, but its operations have latterly become so extensive that the executive determined to rear a structure for themselves adequate to their increased requirements. They are also embracing the opportunity of establishing a Temperance *café*, which will vie in the completeness of its appointments with those already established in several large cities. The frontage to Lombard-street measures 48 ft., with a rear of 56 ft., and height to top of parapet of 58 ft. The entrance to upper floors is in the centre, with a shop for letting on the side not occupied by the *café*. On the first floor there will be two large offices, and the assembly room, which seats about 200. The central staircase, which is of oak, and 5 ft. 6 in. wide, divides into two wings as it approaches the first floor. One of them leads to the body of the assembly room, gallery, &c., and the other to the platform, ante-room, and front seats. The offices to be occupied by the League are situated on the second floor, and are 26 ft. by 26 ft., with a storeroom in addition. On the third floor there is a room 21 ft. by 12 ft. 6 in., in which the preparation of the various delicacies required in the establishment below will be carried on. On this floor is a caretaker's dwelling, consisting of three apartments. The scullery opens out to a flat concrete roof which serves as a yard, although at a height of 40 ft. from the ground. The front will be of Portland cement, with columns on the first floor of polished granite 7 in. diameter, from the Bessbrook Quarries. The surbuses of front pilasters are proposed to be of Minton's encaustic tiles, set in iron frames. The front of the projecting balcony will contain

the name of the building, cut in slates, and gilded.

The estimated outlay is about £3,500, raised by debentures; and the building is being erected by Mr. Thomas M'Arthur, from the designs and under the superintendence of Mr. Joseph C. Marsh, architect.

The Irish Temperance League is also engaged in erecting coffee-stands in various parts of the town, from designs by the same architect.

### EMPLOYERS AND WORKMEN—ENGLAND AND SCOTLAND.

IN several towns in England and Scotland trade disputes exist in the building branches. In London the stonemasons have already made a demand for a rise of wages to commence at a certain date, but it has not yet been acceded to. There is now a report current that the carpenters and joiners of the metropolis are about following suit.

At Glasgow, the German Consul has been in communication with certain officials connected with the associated carpenters and joiners' society, to obtain information regarding the position of that trade, with the view of laying it before the German Government. The action of the plasterers in Glasgow, who seem determined to keep down the number of apprentices to the lowest possible ratio, is leading to some difficulty in the carrying out of building works. It seems that it is difficult to get plasterers there at even 1s. per hour, and that the walls of several shops and warehouses are now being lined with wood instead of being plastered.

At Durham, the joiners have resolved not to submit to a reduction of wages.

At Coupar-Angus, the master joiners have agreed to raise the men's wages  $\frac{1}{4}$ d. per hour.

At Aberdeen, the master's association has resolved to concede the request of the house carpenters for an advance of  $\frac{1}{4}$ d. per hour, but they have rejected the bye-laws proposed by the men.

At Elgin, a number of joiners struck in consequence of the masters refusing to accept a code of new bye-laws.

At Stirling, the joiners are asking for an increase to their wages of 1d. per hour.

In the colliery and iron districts of the sister kingdoms disputes still continue, and in several places lately the men have been obliged to submit to a reduction of their wages, in consequence of a depression in the trade. The agricultural labourers are threatened in different localities with a reduction in their wages, but in some places where the men went out on strike the masters have given way, and the men have resumed their work at the old rate.

### THE DIGNITY AND VALUE OF MANUAL LABOUR.

A THOUGHTFUL article on the above subject has appeared in our contemporary the *Builder*, which is worthy of perusal and attention. It is not the first time that we have endeavoured to impress upon the minds of men in all classes, and particularly the working classes, the dignity of skilled labour, and the pride they should take in their calling when honestly followed. One of the ends of education ought to be, to impress upon the minds of workmen the dignity that attaches to conscientious, efficient, and skilled labour. All labour is honourable, and the more honest and perfect it is, the still more honourable and elevated it becomes. We have not time or space now to deal with the question either in the concrete or abstract, but will content ourselves in quoting the concluding paragraph of the article in the *Builder* :—

"We may, indeed, wonder here for a moment not a little how it is that manual work has come to be considered as a something undignified, and as a something almost to be ashamed of, and to be if possible avoided, and to be thought of as if disjointed

in some mysterious way or other from mental labour. To indicate for the manual worker, and to 'superintend' him while at his work, no man is above; and the fact that in common occupations this can be effectively done, and this together in these days with the enormous increase of work to be done, and aided by machinery,—has without doubt led the world to suppose that the principle is of universal application, and can be carried to any length,—to art work, as to all other kinds and degrees. But this is most surely a fatal mistake, and but serves to show how much is due in this world to accident and the pressure of circumstances. It is manual labour, guided by mental labour, in the same individual, that makes real art-work possible and interesting, as we find it to be in the work of the past, however rude, or to whatever style of art it may belong, whether savage or civilised. It evidences always the individuality of the workman, and such work must always, in the very nature of things, be as 'dignified' as handwriting on paper! Might we not say, more so, for that consists of the perpetual repetition of the same forms, while handwriting in material must needs, in all artistic work, as perpetually vary? Of the dignity of manual work who can doubt who can see into the results of it? The working men have here a something to thank Mr. Gladstone for."

### BOOKS RECEIVED.

*Seventeenth Report of the Amalgamated Society of Carpenters and Joiners.* Manchester, 1877.

THE report of this society now before us records its progress during the past year. It has 317 branches in all quarters of the globe; its members are put down as numbering 16,038; and as to its funds, the respectable sum of £70,109 appears to credit at close of the year. The society was started in 1860, with 618 members. The General Secretary, in the course of his "Remarks," says (pp. viii., ix.) :—

"I last year alluded to the necessity existing for an amendment of the present law relating to injuries received by workmen; as they are now unable to recover compensation from their employer, although they may clearly prove negligence on the part of a foreman or some other person for whose conduct he is usually responsible. A compensation bill was last session introduced into the House of Commons by Mr. Macdonald, M.P., and in a debate which took place the Home Secretary admitted that the present state of the law is unsatisfactory, and offered, if the bill were withdrawn, to appoint a select committee to inquire into the subject. This offer was accepted; the committee was appointed, and before the close of the session they received some very important evidence. It is tolerably certain that they will sit again during the present year, and I trust that when their report is presented it will lead to such legislation as will meet our requirements. We are not asking for any exceptional legislation in favour of workmen; what we want is, that the law shall extend to them the protection which it gives to all other citizens."

Messrs. Chatto and Windus, London, forward us a pamphlet just issued by them, entitled "Great Britain and the Treaties of 1856: Speech of Lord Campbell in the House of Lords, February 27th, 1877, on moving an Address to her Majesty." Our journal being a strictly non-political one, we must decline expressing an opinion on the views so eloquently and forcibly put forward by Lord Campbell upon the Eastern Question.

From Messrs. Cassell, Petter, and Galpin we are in receipt of "The Practical Dictionary of Mechanics," by Edward Knight; parts 3 and 4. The same firm publish in the current number of "Picturesque Europe" some very interesting particulars of Irish scenery and antiquities. We have not as yet been favored with a copy of this serial.

The National Boiler Insurance Company, Manchester, furnish in their chief engineer's report a large amount of information, with illustrations, which will be found useful to insurers and intending insurers of that description of property. The company appears to be progressing, and throughout the year no boiler exploded which was insured under their inspection, though a number have been damaged through deficiency of water.



NOTES ON THE EARLY HISTORY OF  
THE IRISH STAGE.\*

DURING the eighteenth century there have been several clubs in the sister kingdom that had their counterparts in Dublin, and some in the Irish metropolis which were imitated to some extent in London. Irishmen and Englishmen were members of both respectively, and they were not confined to the one class of persons, as noblemen, authors, actors, and others were among the company. The Beefsteak Club, which was formed in Dublin, was the only one of its kind which had not only a lady among its members, but one for its president, who was an actress, in the person of Mrs. Woffington. The Beefsteak Club of Dublin proved an unlucky institution for Sheridan, and the Dublin stage under his management, through the violence of party feelings at the time.

It was an old custom in this city, as it has been in London and other cities in connection with the theatre, for the actors to devote one day in the week (which was generally Saturday) to dine together, and spend a few hours in gossip and social companionship. These meetings suggested to Sheridan the idea of a new formation, but the Beefsteak Club, however good may have been the plan, it turned most unlucky in its execution. The Dublin Club was composed mostly of noblemen and members of parliament, and it is said numbered some thirty or forty members. Its meetings took place in a large apartment in the manager's house, adjoining the theatre, which was furnished for the purpose by Sheridan, and every want provided at his expence in bounteous style, the fascinating Woffington being the only lady admitted. Commenting upon this institution, Hitchcock observes:—"It will readily be believed that such a select assembly enjoying such entertainment free of all expence, and enlivened by the sprightly sallies and *jeux d'esprit* of so lively a president, were as happy as any set of mortals on earth could be; each indulged the hilarity of his disposition, and all was wit, repartee, and glee. Happy for the theatre, if the theatre of the public had beheld this assembly in its true light, harmless and void of all design."

However upright may have been Sheridan's conduct as an actor, manager, and gentleman—and it must be allowed that his character was unstained and above reproach,—yet the constitution of the Beefsteak Club most naturally gave rise to a not ill-founded suspicion on the part of the public. In the first place Mrs. Woffington should not have become a member, and the manager would have acted with discretion if he had dissuaded her. We are left, however, in the dark whether she entered of her own accord or was encouraged to do so by Sheridan, or whether she was unable to resist the solicitations of her noble patrons. When it is remembered that the members of the club were mostly persons attached to the Irish Court, and that the toasts that were drunk on the occasions were of the most loyal and pronounced description, outsiders and those among the public who viewed with disfavour court doings, looked upon the Beefsteak Club as a sort of political party school, designed for sinister purposes. 'Tis pretty certain that Sheridan never intended that the Beefsteak Club should be a school of politics, and we may guess also it was far from the thought of its fair president that she was about being made an instrument in subserving political or party designs. A popular public prejudice, however, was engendered, and Sheridan's actions were misconstrued, and many false stories circulated to his injury.

On October 10, 1752, Sheridan opened his next season with Mr. Digges as Macheath, and Miss Falkner as Polly. On the following night Mr. Sowden made his first appearance in Othello—a character for which he was not suited, though a creditable actor. A few nights subsequently Mrs. Green, a good comic actress, was introduced as Flippanta

and Mr. Costello as Moneytrap in the Comedy of the "City Wives' Confederacy." During this season there were not any performers of merit engaged, save those mentioned.

Sowden remained for many years on the Dublin Stage, and had a short trial at the joint management of Smock-alley, with Victor after Sheridan's retirement. Of Mrs. Green we read she was a great favourite with the Dublin audience, and at the end of her engagement she returned to London, where she upheld her reputation in the comic line. In May, 1753, a native actor appeared at Smock-alley in the person of Mr. Dexter, in the character of Oroonoko, the Widow Locket being played by Mrs. Woffington.

Dexter was the early school-fellow of Mossop, and afterwards his fellow-student in Trinity College. Dexter's first public appearance was two years previously at Drury-lane, under Garrick, in the same character as he appeared in in Dublin. It is related of him by Davies that he was so unconcerned about his approaching performance on the first occasion, that he continued in conversation with his friends in the pit till the second music, which was generally played half an hour before the curtain was raised, put him in mind that it was time to think of being in readiness for his part. Garrick, it is stated, was well pleased with Dexter's first essay, and augured for the actor great success in the future. Dexter acted Oroonoko several times, and each time with applause, but it was remarked that after some time he abated in power to please his audience. He possibly lacked ambition, and, having conquered approbation at his first start, became careless of following up his success by study and care. Dexter, nevertheless, though he failed to obtain a marked position, possessed versatility, and acted in an extensive round of characters. He is described as tall and elegant, in address easy, in manners gentle, modest, and uniform. He lived through life much beloved, and after a career of many years, died sincerely lamented by all who knew him.

Through the incessant labours of Sheridan, the Dublin Stage had been gradually reformed, and at the time of which we are writing, its reformer was hopeful that his labours were about being recompensed by the increasing patronage of the public which was being manifested. Faction and party feeling, however, were rife in the city and provinces. At a moment when success was assured, and as his harvest was about being reached, the cup for which he thirsted and long and honestly toiled for, was dashed from his lips. He had elevated the Irish Stage, but he was fated to see the dream of his life fade hurriedly from his sight. Smock-alley, under Sheridan, had obtained a position equal to any theatre then in London, and often, instead of being an imitator, the Irish stage served as a model for imitation for the capital of the sister kingdom. Writing of this period, an author whom we have frequently quoted, and whose position qualified him for speaking with authority and knowledge of the facts, remarks:—"At this time the theatre was the fashionable resort of all ranks. Crowded every night with the first characters in the kingdom, it was in reality a source of entertainment and instruction. Its exhibitions might grace a Greek or Roman Stage. Propriety, order, decorum, presided over the whole. Its professors were held in the highest estimation, admitted into the first assemblies, and treated with the utmost respect. Such were the effects of Mr. Sheridan's management."

The blast of popular discord was soon to be felt within the doors of the theatre as well as without; and the existence of the Beefsteak Club, of which so many strange surmises were held, helped to keep party feeling rife. The accidental production of the tragedy of "Mahomet" by Sheridan at Smock-alley at this juncture had the strange and unlucky effect of precipitating a disastrous issue for the manager. He was credited by his enemies with having a design in bringing forward this play at the time; but it appears that the play

was cast for the season previous, but laid aside, as its late production in the season would interfere with the benefits. No sooner was the play advertised than Sheridan's opponents took alarm, and prepared to demonstrate their sentiments by publicly marking whatever passages in the piece they thought agreed with their opinions. Saturday, February 2nd, 1754, arrived, and the cast of the characters, as announced, was as follows:—Zaphna, Mr. Sheridan; Mahomet, Mr. Sowden; Alcazor, Mr. Digges; and Palmira, Mrs. Woffington. On this memorable and unfortunate night the house filled immediately, and the disturbers and leaders of the opposition planted themselves in the pit ready for action, if their demands were not complied with. The passage which was marked out for a demonstration on the part of the disturbers was that in the first act where Alcazor exclaims—

"If, ye powers divine!  
Ye mark the movements of the nether world,  
And bring them to account! crush, crush these vipers,  
Who, singled out by the community  
To guard their rights, shall, for a grasp of ore,  
Or paltry office, sell them to the foes."

Scarcely had this passage been delivered by Digges when the disturbers in the pit loudly demanded an *encore*, and so prolonged was their demand that the actor was astounded at the unexpected call, and was unable to proceed. At last he summoned resolution, and, with a misgiving as to the consequences, spoke the whole speech over again. The disturbers, having obtained their ends, were loud in their plaudits, after which the performance was allowed to proceed. It was observable, however, that Sheridan and Mrs. Woffington—who were previously great favourites, and who acted through the finest scenes in the play—were allowed on these occasions to perform their respective parts without the least notice, whilst the character of Alcazor was specially marked for applause. Hitchcock held that this oblation was evidently the work of party, and he thought it was unaccountable why Sheridan should have allowed the play to be again given out. He is sorry to say that in this fatal instance the good sense of the manager seemed to have deserted him, and he pertinently re-remarks, "A manager, as he is the steward of the public at large, ought carefully to avoid attaching himself to any particular interest; but when matters were so enflamed, that even the most rational persons were prejudiced, and could not reason coolly on political subjects, to throw such an opportunity in their way, seems at this day an unaccountable infatuation."

The same writer is of opinion that the reasons afterwards assigned by Sheridan were totally insufficient to excuse him. According to the manager, it appears from his own statement "that he had consulted some of the coolest of his friends, who told him, they could see no reason why he should lose all the advantage of the time and labour which it cost him and the company to prepare this play, because twenty persons in a former audience had stamped the name of a party play on it; that he received many messages that this play was desired, and unless performed would be insisted upon." This certainly goes to prove that each party looked on it in that light.

It was a month after when the repetition of "Mahomet" took place, which was on the 2nd of March, and on the Friday morning previous Sheridan sent a general summons to the company to meet him in the green room. When all were assembled, he read them a lecture he had prepared, bearing upon the duties of manager and actors, and the proper conduct of the stage, suggested obviously by the scenes that had recently taken place in the theatre. This essay is a somewhat remarkable one, and it is marked with much wisdom and plain common sense. It is a document which possesses no small value in connection with the theatrical annals of the country, and as it is written by one fully qualified to speak upon the subject, it ought not to be omitted from the historic account of the Irish stage. We shall give it

\* See ante.



as it appears in Hitchcock's volume, and we agree with that author in thinking that the statement does Sheridan infinite credit, and demonstrates the purity of his intentions.

### TREATMENT OF IRON FOR THE PREVENTION OF CORROSION.\*

DISCUSSION.

(Concluded from page 84.)

MR. Cobb asked whether this new process of oxidation would be applicable to plates for iron shipbuilding? At present the oxidation of these plates was prevented, as far as possible, by the use of cement, but this was liable to danger, as was proved some time ago in one of the ships in the navy, which would have been lost in the Indian Ocean but for the discipline and bravery of the crew. In the merchant service, ships were continually taking in cargoes which affected their plates, and these sometimes became very much like strong brown paper. If, therefore, this process was applicable to such a purpose, Professor Barff had a magnificent future before him.

Admiral Selwyn said that, in considering this magnetic oxide, they could not do better than look to what nature taught them of its properties. In New Zealand you could find any quantity of this substance, which had remained totally unchanged even by the action of salt water during all the centuries which had elapsed since the creation of the world. Man generally put together substances with which nature did not furnish him, but in so doing he put them into a state of unstable equilibrium, and the air then set to work to undo and disintegrate what he had put together. If you looked at the old pictures in the great galleries of the world, which were mostly painted with earths and ochres, you found no change in the colours, and in the Florentine galleries you would always find that those who were engaged in copying the works of the old masters refused all chemical ingredients, and relied on ochres and earths, and their colours remained, whilst those of many modern masters did not. There was already some experience of the lower form of this process, for Mr. Perkins, in his steam boilers, pressed the steam up to about 450 lbs. on the square inch, and his tubes had been found after thirteen years' use not to have undergone any change of the slightest description. They had an imperfect coating of magnetic oxide upon them, but Mr. Perkins, while he knew that they had not decayed, was not aware of the reason, which Professor Barff had so ably brought before them. Professor Tyndall also, in his "Heat a Mode of Motion," stated that by the use of a powerful gas metals might be varnished. Now, this was a very powerful gas, and although he had told Prof. Barff that he did not see his way to subjecting rivetted structures, which had to stand a heavy tensile strain, to a great heat, which might alter their tensile strength, he had no doubt that in the future this invention would be largely used for such articles, and he would thus be able to introduce it into structures which now became quite unsafe in the course of a few years from the tendency to rust, which had never yet been overcome. The girders along the Metropolitan Railway were becoming rotten much more quickly than the proprietors could wish, and many iron railway bridges were rapidly failing from the same cause, because it was impossible to properly protect them. He thought, therefore, the Society should hail with satisfaction even the beginnings of such an invention, and he should deprecate the notion of saying you must try a great deal more before we could accept what has been already accomplished. He feared that a great many good inventions had perished for want of a little encouragement, which might have brought them to success.

Mr. A. Barff said that when charring peat some three years ago on the Duke of Sutherland's estate, they used superheated steam, and he had brought with him two pipes through which the steam was conveyed into the hot chamber, the inside of which was covered with just the product of which Professor Barff had spoken. The pipe had been broken in consequence of a stoppage, and had been knocking about ever since, but it showed no sign of change. The chambers used were about 32 feet by 6 feet, and the superheated steam was conducted into them along with the products of combustion, which probably would interfere with this process.

Dr. Le Neve Foster said it occurred to him that this process might be very usefully applied to mining pumps. Those who had anything to do with copper mines, and mines containing iron pyrites, were aware how quickly the water acted on these

pipes and destroyed them, and some various expedients had to be resorted to in order to protect the iron.

Mr. Penrose asked if this process would in any way impair the elasticity of the iron?

Mr. Pearsall said the invention would be of immense importance if it could be applied to steam-boilers to prevent corrosion; and asked if any experiments had been made to ascertain whether the magnetic oxide would withstand the action of hot water and steam, or acids.

Dr. Graham remarked that those who were not acquainted with chemistry might suppose that this magnetic oxide would take up more oxygen and so undergo decay; but of all the oxides of iron there was none so stable as this, and it was capable of doing that which the sesquioxide would not, remaining in the position in which it was formed without disturbing the molecular arrangement of the surface. This was the great invention of Professor Barff, that he had been able to form this black oxide *in situ* without disturbance of the molecular arrangement. It could be applied not only to utensils and other small articles, but to many other purposes, such as iron railings, which were usually let into stone with lead for the express purpose of wearing away by oxidation. He believed the invention had a grand future before it.

Prof. Barff, in replying to the various observations, said that sulphide of zinc was not oxidised in the presence of atmospheric oxygen, and, if it were, it would not set free sulphur. Sulphide of zinc was represented by  $ZnS$ , whilst sulphate of zinc was replaced by  $ZnSO_4$ , so that the sulphide could only become sulphate by taking up oxygen, not by setting free sulphur. Why sulphur was set free in the experiment which had been mentioned, he believed to be because the precipitates were not properly washed from the alkaline sulphides. He could not say the exact proportions in which the materials were used, not having the laboratory books with him. He could only say that the amount of sulphate of baryta was extremely small, the object of using it being simply to keep the particles of the sulphide of zinc separate from one another in the heating process so as to render the mass more pulverulent when ground. The magnesia sulphate was mixed with the zinc sulphate and both were precipitated with an alkaline solution of sulphide of sodium, the consequence being that the magnesia was precipitated as an oxide, and was intimately mixed mechanically with the sulphide of zinc. The magnesia itself had little or no body, it did not take up much space in the bulk, and therefore would not interfere with the opacity which was found to exist in the fine sulphide after it had been calcined. If the sulphide were simply precipitated from an aqueous solution, it went down in a sort of gelatinous state in order to bring the particles together, and alter their molecular arrangement, which it was well known had an important effect both on the colour and transparency of bodies. Mr. Griffiths told him that for a year he had used this sulphide of zinc with water, and therefore he did not anticipate that there would be any change if it were exposed to the action of water, but the experiment could be easily tried. With regard to the iron process, of course three or six months was no trial, if it were classed with other processes which had been used for coating iron, because a coat of paint would last for twelve months; but if that were scraped off anywhere, and oxidation took place, it would rapidly spread underneath, and throw off the paint. This was not the case with this process, however, as would be seen by examining some of the specimens where the oxidation would be found to be localised, and not to have spread in any direction. The only point to be considered in reference to its durability was whether the oxide adhered perfectly to the iron, and that had been vouched for by Mr. Ward, because emery cloth would not touch it. Admiral Selwyn had called attention to the fact of the sea-shore being covered with magnetic oxide, which did not rust; and some of the articles on the table had been exposed to the action of salt water, and others to water charged with the acid vapours of the laboratory. No doubt pure hydrochloric acid would affect it, but mixed with nitric acid it would not. Common iron would withstand strong sulphuric acid, but if diluted it would act upon it. In answer to Mr. Penrose, he could not see how the strength of the iron could be affected, as it was never raised to a white heat, and only a film of the surface was affected; but it would be easy, if necessary, to add so much to the thickness of the iron, which had to bear a strain. The temperature could not affect it, because the metal had previously been welded or worked at a much higher temperature, and there was no contact with the steam lower than the oxidised surface. The superheated steam would no doubt penetrate in the course of time, because the pieces of pipe produced by Mr. A. Barff showed that half the thickness had been

converted into oxide. A gentleman at Mr. Penn's had promised to get some iron bars tested, but he had not been able to come and make known the results. Water did not affect the iron where the oxidised surface was perfect, but where it was knocked off it did. There was a difficulty about the application of it to ship-plates because they must be raised to a red heat, or a little above, and it was a question for a practical boiler-maker whether that would cause the rivets to start. He had asked one or two, who said they did not think it; but perhaps Mr. Bolling could answer that question.

Mr. Bolling feared the heat would destroy the caulking of the rivets.

Prof. Barff said he was afraid they must, for the present, leave the question of coating iron for ships, but he hoped the difficulty would ultimately be overcome. When they commenced, the number of failures were most dispiriting, but his friends, who were assisting him, had stood by him manfully, and he hoped in time, by a continuance of the same pluck and perseverance, they would be able to solve the difficulty, even in the case of boilers and iron ships.

### A FREE PUBLIC LIBRARY FOR DUBLIN.

On the 19th ult., a public meeting was held at the Mansion House, presided over by the Lord Mayor, to determine whether the Public Libraries Act (Ireland), 1855, should be adopted. Mr. E. Dwyer Gray, who brought the question recently under the attention of the Corporation, addressed the meeting at some length on the nature of the act. The Recorder followed in moving the first resolution—"That the Public Libraries Act, (Ireland), 1855, be now adopted," supporting the resolution with pertinent observations. Several other speakers addressed the meeting in favour of the adoption of the act; but Mr. Sexton, one of the directors of the Mechanics' Institute, opposed the proposition. He urged that there were several libraries at present in the city, which were not availed of by the public, and he was also opposed to the adoption of the act on the score of an increase of taxation, instancing that the city was at the present taxed to the extent of 10s. in the pound. Rev. Mr. Prendergast next moved—"That in the opinion of this meeting the body having the management and control of the Public Library in Dublin should, in accordance with the usage in England, be a joint committee composed of members of the Town Council and other citizens, and should represent all denominations." After having been spoken to by the mover and seconder, and supported by a short speech by the Dean of the Chapel Royal, the resolution was unanimously carried. Alderman McSwiney moved the next resolution, which was seconded by Mr. Henry Wigham, and supported by other speakers. It was to the effect "That a memorial be presented from this meeting to the Chief Secretary for Ireland, pointing out the difference between the English and Irish Acts, both with respect to the formation of the library committee and the borrowing powers of the local authority, and praying him to take steps to have the law in the two countries with respect to Public Libraries assimilated during the present session. That the chairman be authorised to sign the memorial when prepared, and that copies be sent to all the Irish members of Parliament."

We have already expressed our opinions on the Free Library Question. We are in favour of carrying out the provisions of the Act, and have for many years advocated the establishment of a Free Library in Dublin and in other towns in Ireland. We must add, however, that a good deal depends upon the body having the management and control, whether the Free Public Library of Dublin will be a success, or little better than a failure. We are opposed to any increase of taxation or the employment of any costly staff, but on the other hand we are in favour of every project likely to lead to the elevation and enlightenment of the people.

\* By Professor Barff, M.A. Read at meeting of Society of Arts, February 14th, 1877. See p. 70, ante.



### NEW ORGAN, OMAGH PARISH CHURCH.

On Thursday, the 15th ult., a choral service was held in the above church, when a new organ, built by Messrs. Telford and Telford, of St. Stephen's-green, was inaugurated. The organ is placed in north transept, and is enclosed in an exceedingly neat Gothic case, stained and varnished. The pipes are richly and chastely decorated in colors. The instrument consists of a great organ of ten stops, a swell organ of eight stops, and a pedal organ with 16 ft. open diapason. The following are the details:—The great organ—CC to G—56 notes: bourdon, 16 ft. tone; open diapason, 8 ft., do.; gamba, 8 ft., do.; flute a pavilion, 8 ft., do.; hohl flute, 8 ft., do.; flute harmonie, 4 ft., do.; twelfth, 3 ft., do.; fifteenth, 2 ft., do.; mixture, 3 and 4 ranks. The swell organ—CC to G—56 notes: open diapason, 8 ft.; dulciana, 8 ft.; stopped diapason bass, 8 ft.; rohr flute, 8 ft.; octave, 4 ft.; fifteenth, 2 ft.; cornopean, 8 ft.; oboe, 8 ft. The pedal organ—CCC to F—30 notes: double open diapason, 16 ft. Couplers: swell to great, swell to pedals, great to pedals. Three composition pedals. Total, 1,050 pipes; 21 stops. On the occasion of opening of organ, Mr. W. H. Telford, Mus. Bac. T.C.D., presided, and afforded, we are informed, a rich musical treat to those present. The choir was under the direction of Mr. Baker, the newly-appointed organist, and a well-arranged selection of sacred music was got through. The cost of the instrument was about £500.

### BUILDING ACTS— ROTTEN FOUNDATIONS.

At a meeting of the Metropolitan Board of Works, London, Mr. Selway submitted for the approval of the board the draft of a bill to amend the Metropolis Management Act of 1855, the Metropolis Building Act, 1855, and the acts amending the same respectively, with respect to houses and buildings. He mentioned that there were three very important points touched upon in the bill with respect to the powers sought to be acquired by the board over the building of houses in certain roadways, and the width of the latter; the prevention of the erection of houses on foundations which had been made the receptacles of all kinds of refuse and rubbish, and a veto in the construction of ill-designed buildings, of bad materials, &c. The proposition was supported and approved.

When will our Dublin Corporation earnestly bestir themselves in procuring the passing of a Building Act to regulate the erection of dwellings in this city? It is an urgent want, and we have been advocating it for years, knowing the nefarious practices that have been, and are still carried on by unprincipled building speculators in the matter of bad foundations, bad drainage, or no drainage, and bad materials and workmanship.

### LONGEVITY.

A CENTENARIAN BRICKMAKER.—At Saltburn-by-the-Sea, a centenarian brickmaker still earns his living at his trade. His name is James Norris; he is in his 103rd year, and was born at Corsham, in Wiltshire. On the occasion of his 102nd birthday, several gentlemen paid a visit to the brickworks of Mr. John Hutton, for the purpose of seeing him at work. He managed to load and wheel a barrow on which were 23 unbaked bricks, the weight of which, without barrow, was 200lb.

There is now an old woman named Mary Whelan, but commonly called "The Bee," residing in the parish of Skurke, near Borris-in-Ossory, Queen's County. She states that she was 25 years of age in '98, or, as she calls it, "the troublesome times." Accordingly, she would now be the good round age of 104. She is a little infirm, but her intellect is as clear as ever.

Our (*Coleraine Chronicle*) obituary column today presents an unusually large number of announcements of the deaths of persons who had advanced to great ages, the average of eight males and females giving a life-time to each of 88 years.

Amongst the oldest is that of Mrs. Mary O'Kane, who was eighteen years old at the commencement of the present century, and was a middle-aged woman at the time of the Battle of Waterloo, her recollection of that event and the more local incidents of the civil disturbances of an earlier day being clear and vivid to the last.

On the 29th ult., at 132 Pembroke-road, Emily Brocas, in the 81st year of her age. The deceased lady was sister to the late Henry Brocas and William Brocas, R.H.A. By her death we believe the name has become extinct in this city. It is not known in what way she has disposed of the valuable paintings and books of which she died possessed.

On the 23rd ult., Mrs. Eliza Macmahon of Rush, Co. Dublin, died at the age of 104 years and 10 months. She belonged, we are told, to the labouring class, was a woman of keen intellect, and possessed all her faculties unimpaired till the last. It appears that her mother lived to be 107 years old.

### WOOD-WORKING MACHINERY.

ROYAL DUBLIN SOCIETY.

AMONGST the exhibitors of machinery at the Spring Show of the Royal Dublin Society, which is to open on Tuesday, we have to draw attention to the stand of Messrs. F. W. Reynolds and Co., of London, whose exhibits last year and previously attracted such attention. Some novelties are introduced by this firm, which are worthy of critical examination by our clients.

### HOME AND FOREIGN NOTES.

WOOD PAVEMENT IN AMERICA.—The City of Washington has expended 4,500,000 dol. in wooden pavements, which have now to be removed, and are nearly impassable,—fifty miles of soggy blocks, hardly fit for firewood.

WORK FOR THE CRIMINAL CLASSES.—A bill will shortly be introduced in the Virginia Senate doing away with the sending of persons convicted of the lower grades of crime to the penitentiary, and instead to make them work on the roads in the county in which the offence is committed.

THE AUDITOR'S SURCHARGES.—Messrs. Byrne, Lawlor, and other members of the Municipal Council, have paid £73, in which they were amerced for legal expenses connected with the Amendment of the Public Health Act of 1874. The auditor made the surcharge last year, and the L.G.B. have confirmed his decision.

AN ITEM OF ASSURANCE.—A provincial weekly, in bringing before its readers the progress making by a certain Life Assurance Company, says:—"The extraordinary number of 1,374,540 policies were issued during the year! We are told that an average of 30,000 policies are issued weekly, and that nearly 300 male and 100 female clerks are employed at the offices." !!!

SIR R. STEWART'S LECTURES.—Sir R. Stewart is delivering an interesting series of lectures on "Miracle Plays." In some of these already delivered he gave a description of those performed centuries ago in different places in England, and also of ones performed in Kilkenny, and the streets of Dublin. Of the latter we furnished our readers with some particulars in our back volumes.

THE STATE OF THE LIFFEY.—Since the date of our last issue a memorial from certain inhabitants of the City of Dublin was presented to the Lord Lieutenant, praying his Excellency to take measures for compelling the Corporation to do something towards the purification of the River Liffey, or for the issue of a Royal Commission to inquire into the matter. Messrs. Williamson and Hobson, the solicitors on behalf of the memorialists, were informed that the matter would receive his Excellency's most favourable consideration.

MESSRS. WEBB AND CO.'S WAREHOUSE.—The warehouse just completed for the above firm in Corn Market, included the rebuilding of the entire front block extending back upwards of thirty feet. The two fronts are faced with cut granite from the Wicklow quarries. The building, as a whole, will add to the street improvement in that quarter. The work appears to have been well executed. Messrs. Sibthorpe and Son, of Cork-hill, supplied the plate glass of the shop windows. The contract for lighting was carried out by Messrs. Curtis and Son, Middle Abbey-street. The builder was Mr. Bolton, and the architects Messrs. McCurdy and Mitchell.

THE ARTISANS' DWELLINGS ACT IN DUBLIN.—Mr. John McEvoy very pertinently asks what

has become of the Dublin Artisans' Dwellings Act scheme. He reminds the public that the Corporation applied for a loan of £1,000 for preliminary expenses, which the Treasury thought fit to refuse as unnecessary and unprecedented; and he further asks:—"Can it be possible that this refusal has dealt a death blow to the project? If so, would it not be well that somebody gave us, on behalf of the Corporation, an estimate of the amount of those 'preliminary expenses,' so that we might see what it is that has frightened the philanthropists in the Town Council from dealing with the little plots in Boyne-street and the Coombe they dignified with the title 'Improvement arcas.'"

TENEMENT HOUSES, AND THEIR OWNERS.—Our contemporary, the *Sanitary Record*, has made a certain "persecuted guardian," who, we believe, is also a member of the sanitary authority in this city, the subject of some well-timed remarks. "We hope," says our contemporary, "the public health authorities will take the 'persecuted' (?) specimen of this worst order of rascals before the learned recorder, and that in spite of his local eminence as a guardian and a sanitary authority, the aggrieved one may be afforded a sufficient time for wholesome reflection in the cooling atmosphere of a prison cell." Have we not over and over again for years back been drawing attention to the tenement hovels of Dublin, and telling the public that some of the owners of the worst of them were members of our local boards. The fact has been well known, but the nuisance was still allowed to continue.

THE GOVERNMENT OF IRISH TOWNS.—Many curious matters have been brought prominently before the public by the Local Government Commissioners in their inquiry into the taxation and management of Irish towns. During the last month at Naas and Drogheda, some witnesses who were examined gave interesting and useful, and even startling evidence. At the former town it appeared that some corporate property was alienated by the old corporation of that town, previous to the passing of the Municipal Act of 1840. We fear corporate property in several other Irish towns was made away with to a large extent about the same period. It appears by the inquiry that the principal wants of Naas and Drogheda at the present time lie in a sanitary direction, and that they stand in need of better systems of sewerage and water supply. At present these towns and others are depending to a great extent for their supply of water on the public pumps, many of which have been condemned as yielding water unfit for drinking purposes.

IRISH LANGUAGE AND LITERATURE AT HOME AND ABROAD.—The example set by our contemporary, the *Tuam News*, in devoting a column or two of space to a "Gaelic Department," might be profitably and usefully imitated by other native journals. The "European Correspondent" of the *New York Irish World* has during the last two months written a series of articles for that journal, treating of Irish architecture, literature, and illustrious Irishmen in past times. These articles have been reproduced in the *Tuam News*, and they seem to have been suggested by the publication of Canon Bourke's work on "The Aryan Origin of the Gaelic Race and Language." Although the articles in our transatlantic contemporary are written in a rather impassioned and extreme style, and not free of errors, yet as the extracts from various authorities are ample and mostly to the purpose, the articles as a whole will doubtless have much interest for Irish-American readers. Good may be done by these publications if it leads our countrymen abroad to cultivate a closer acquaintance with the language and history of the mother country.

DRAUGHTS IN TRAINS.—Draughts encountered in railway travelling are the active causes of many intolerable attacks of neuralgia. Occasionally they have more permanent consequences. To avoid this peril most persons try to secure places with their backs to the engine. This answers well enough as regards the seat next the window, hut, owing to the angle at which the air enters the rapidly advancing carriage when a window is open, the occupant of the second seat with his back to the engine receives a reflected current of air, not so strong, but fully as likely to produce what is popularly called a "chill" as that to which the brave traveller who "likes air," and persists in riding forwards, with the window down, exposes himself. The prudent man, who has esconced himself in the second seat, and rides backwards, probably finds a tingling in the ear nearest the window, and possibly suffers a mysterious attack of "toothache," or "tic-douloureux," some days afterwards. Anyone interested in the subject may work out the conditions of this phenomenon with the aid of a pencil, and the familiar law that angles of reflection are equal to angles of incidence. This simple circumstance seems to have been unaccountably overlooked.—*Lancet*.



**PUBLIC HEALTH (IRELAND) BILL.**—The bill introduced by Sir Michael H. Beach and the Attorney-General for Ireland (to consolidate and amend the acts relating to public health in Ireland) has been printed. It consists of 288 clauses, and fills with the schedules 110 pages. A memorandum prefixed to the bill states that its objects are to consolidate into one act the various provisions with respect to sanitary matters and burial grounds of the several acts, no fewer than twenty in number, in Ireland, and to amend them where amendment is required. Among the sanitary provisions, one which makes the keeping a "swine or pig sty" in a dwelling-house in any sanitary district, liable to a penalty. The bill confers more extensive powers upon sanitary authorities for water supply, and upon urban authorities for gas supply, than at present possessed, and makes some changes in the law relating to burial grounds. It is provided among other things that the sanitary authority of each sanitary district shall be the burial board for that district instead of the present rule, under which many towns and townships below 6,000 in population are the burial board districts, although not the sanitary districts. The Act also provides for the closing of burial grounds, "for the maintenance of public decency, and to prevent a violation of the respect due to the remains of deceased persons."

**THE BALFE MEMORIAL.**—We regret to say that the movement begun in 1874 for the purpose of raising funds and erecting a testimonial to the memory of our countryman, Balfe, has been a failure up to the present. The funds in hands only amount to a miserable few pounds. The affair seems to have been very badly managed. The following resolution was moved and carried at a meeting of the committee, held a few days ago:—"That the committee having so far back as May, 1874, placed in the most public and prominent manner before the Irish people the claims of the great Irish composer Balfe to have a befitting monument erected to his memory in this his native city, is of opinion that the response made up to the present time is wholly inadequate and unworthy as an expression of appreciation, on the part of his countrymen, of his splendid musical genius; and that the committee now earnestly call upon those who admire genuine talent, and who have so often derived enjoyment from listening to his music, to come forward and aid in the erection of a suitable monument to his memory."

### THE MAIN DRAINAGE QUESTION.

THE kaleidoscope has got another shake, and we have in consequence a new phase of the Main Drainage question. It will be remembered that the Corporation have long persisted in an outrageous scheme which would have saddled the city with a heavy taxation for years. That scheme had to be given up, but not before several thousands of public money were expended upon its promotion in one shape or another.

Recently the Pembroke and Rathmines Commissioners promoted a drainage scheme for the relief of their respective townships. This bill is at present passing through Parliament, but the Corporation of Dublin have given it a persistent opposition from its first inception. It is probable that the bill will be carried, though no one could predict with a certainty that such will be the case.

In the meantime the Corporation, conscious of their unenviable position, have evinced a desire to merge their own darling scheme in that of the two townships, and have consented to conference upon the subject. Half a loaf, 'tis said, is better than no bread, and the Corporation think that they can now extract something to their own advantage by going into partnership with the townships. Was there ever such "a come down" before? "Cook of the walk" playing second fiddle! The Corporation will, no doubt, through their agents, claim merit for their noble humility and disinterested magnanimity.

Irony aside, little thanks are due by the citizens and ratepayers to the corporation for their present move. They wasted money as long as they could, and the spirit of opposition was so dear to them, that they indulged in it up to the eleventh hour. They might do worse now than joining with the townships, and trying what advantage a joint scheme could confer upon the city. The scheme of the Pembroke and Rathmines Townships may not be perfect, for no drain-

age schemes are, and objections have, we know, been urged against it in the matter of outfall, but we have no doubt it can be improved upon. One thing is clear: that the townships require a good system of drainage, and whether working apart from the Corporation or with it, the work required cannot be much longer deferred. A main drainage scheme for the city is of course indispensable, but not one like that which has met an almost universal condemnation.

In the meantime the Liffey purification is one of our most urgent wants, and another is the demolition of hundreds of houses unfit for human habitation, provision being made beforehand for those dispossessed. This last want could be supplied by the proper and honest carrying out of the Artisans' Dwellings Act. Little is done by our corporation, and talk takes the place of work. The cleansing of our streets is nearly altogether neglected. It is a wonder our city rulers do not coolly tell the public that it is impossible to cleanse the streets until the main drainage is completed. It is a fact, however, that a large quantity of the mud of the streets passes into the sewers, with and without man's aid.

### TO CORRESPONDENTS.

**FREE LIBRARIES.**—We hope that no more time will be wasted in agitating this matter, the utility of which ought to be apparent to every intelligent citizen. Twenty years and upwards have been allowed to pass over, and several thousands of pounds have been fruitlessly expended by the Corporation, while the act which could be availed of with benefit to the whole community was allowed to remain a dead letter. It seems impossible for some corporate bodies to do a straightforward duty. Acts are now promoted and carried out, not for the benefit of the public, but for the creation of places, and for the practice of jobbery and bits of patronage. Advocates, as we are and always have been for the establishment of a Free Library in Dublin, we have a misgiving that the affair in this city will suffer from ill counsel and mismanagement, if the ratepayers do not bestow a little more attention to the subject.

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

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## Illustration.

QUEEN ANNE CHIMNEY-PIECE IN THE ROOKERY,  
STANMORE, MIDDLESEX.

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## THE IRISH BUILDER.

VOL. XIX.—No. 416.

## PROFESSIONAL ARCHITECTURAL REFORM.

PERFECTION can never be obtained or maintained in any worldly institute, but improvement at the same time is always possible. For

some years back the constitution of the Royal Institute of British Architects called for a remodelling in many ways, and the needful reforms pointed out were acknowledged by members of the Institute itself to be indispensable, but sufficient courage was not summoned by the council to undertake the duty, until outside pressure was to some extent applied. This external pressure was two-fold in character. In the first instance it dated back for some years and was continuous on the part of the oldest professional

journals, one of which was well qualified to speak in the name of the profession; and secondly, an advanced general public opinion expressing itself not always wisely but often unjustly aided in hastening the reform. From combined causes, therefore, the Royal Institute of British Architects has been led to perform a long-deferred duty which must result in much good, as well as adding to the dignity of the profession. Our remarks are, of course, suggested by the revised code or the alteration in the rules of the Institute proposed by the Improvement Committee which has now obtained the general sanction of the body.

It cannot be denied that heretofore the Institute did not afford an adequate representation of the interests of the profession in town or country, notwithstanding its somewhat ambitious name. Its machinery was very imperfect, and its rules too elastic in some particulars and somewhat too strin-

gent in others. There seemed to us to be always too much of the trade element and spirit in the Conduit-street body, and this gave rise to insinuations which eventually found open expression in the public journals, charging the Institute with a connivance with abuses wholly unworthy any society of gentlemen, much less a representative institute of the architectural profession.

The Institute as a body was not guilty of the offence charged against it, though some of its members might be at fault; but, on the principle that one scabby sheep infects the flock, certain enemies of the Institute did not hesitate to say and write that the members, from the highest to the lowest, were "all tarred with the same brush." Wisdom may even be learned from enemies; and, now that the Institute has put itself right before the country, we hope certain parsons and lawyers, and other disappointed folk, will be satisfied. We are not sanguine, however, that the leading morning journal of the sister metropolis will not renew its charges, or will cease to give facilities to others to make sweeping and unsupported accusations.

According to the new rules, in future there will be a complete elimination of trade interests from the Institute, as in relation both to fellows and associates, honorary or otherwise. By the original bye-laws this object was supposed to be obtained, for strictly professional members were debarred from having any interest or participation in trade, or the acceptance of any pecuniary consideration in emolument from tradesmen engaged, or work engaged under their superintendence. It was in connection, however, with honorary fellows and contributing fellows, where the regulations were so lax, that abuses crept in. These class of members, though they might be elected on the score of their high attainments, were at liberty outside doors to mix themselves up to any extent they liked in trade matters; and some of them often utilised the Institute meetings to speak in favour of certain patents and inventions, and manufactures in which they had a direct or indirect interest. We are glad to see the class called Contributing Visitors done away with, and the associates divided into two classes—"Associates" and "Honorary Associates." The former, as before, will be composed of persons engaged in the study of architecture, but not being in business on their own accounts for as much as seven years; and "honorary associates" shall be persons engaged in the study, but not in the practice, of civil architecture. The latter will correspond in some respect to the defunct contributing visitor, but with the reservation that they shall be "unconnected with any branch of building as a trade or business." If the above rules are enforced in the letter, and not in the spirit, then every breach of them will mean expulsion of the offending members, and justly so. There is a new arrangement in the revised code for the election of the council and the higher officers of the society, which we think will be conducive of good. The scheme is that adopted by the Institution of Civil Engineers, from which body the architects, as a profession, might take more than one useful hint. The adopted scheme provides that in nominating a list of members eligible for the election to the council, a margin in respect to members should be left, that from the council the vice-presidents in the order of their seniority of office, and from them, on the same prin-

ciple, the president shall be chosen. In carrying out this scheme it will be seen the usual routine election of the "House List," so called, will be got rid of. These and other provisions also, which secures the men who are really efficient, and are regarded as such by the general body, shall be at the head of the official corps. Another decision secures that after May, 1882, all candidates for election as associates shall pass an examination as a test of their professional training. This is certainly a real and most important improvement, for no person ought to be admitted as an associate to this Institution without being duly qualified. Few men have heretofore submitted themselves for a voluntary examination, but when it becomes imperative or compulsory, it will carry with it a value in the eyes of all industrious and aspiring young practitioners, and add also to the dignity of the profession and the Institute.

An earnest effort has just been made in the revised code, to give to the Institute a more national character than has hitherto obtained. All distinctions are to be done away with, with the exception of some minor details, between members practising in London and in the provinces. The subscriptions of all are to be placed on an equal footing, and the special conditions concerning the representation of country architects in the council, and so forth, are now withdrawn. By the new scheme, all or a number of the members of the council may be country members, for any country member, if he has sufficient distinction, or if he care to stand, may be chosen. Modifications of previous rules are also made, to facilitate the election of those living at a distance. The new bye-laws made it clear, that any architect is at liberty to supply quantities for his own work, but only on the understanding that they are paid for by the client direct, and not by the contractor. This will tend directly to put the architect in his right position, for he is not, and should not be, the servant of the contractor, for his duty is to represent his client faithfully with befitting honour, and with dignity, in view of his own position.

The question as to the future relation of the Institute to kindred or provincial architectural societies, is not made the subject of any special rules. This is a subject which we have spoken upon in this journal several times, for we deemed it an important one in many respects, in consequence of differences in local practice, habits, and custom. The Improvement Committee, however, in their report make some suggestions, which are adopted as a basis of future action, if necessary. It is suggested that the Institute should keep up a continued interest in the proceedings of provincial bodies by a correspondence with them; and as means to this aid, a list of the leading architectural societies of the kingdom, and the names and addresses of their presidents, secretaries, and professional members, should be kept duly filled up, and that copies of the sessional papers, particulars of the architectural examinations, and the various prizes of the Institute, should be from time to time officially forwarded to such societies, and, to use the words of the report, "such other information as to the proceedings of the Institute as may tend to bring the corporate representatives of the profession throughout the kingdom into useful co-operation." We are pleased to see that this course has been adopted, and has been considered better in principle than the



policy formerly proposed, of recommending and attempting an official union between the local and provincial societies and the Institute in London.

This is just what we strenuously advocated. Let provincial architects of standing or ambition, if they like, become members of the Institute, but let local architectural societies by all means exist, become extended, and pursue and maintain their independent action. This principle is by far the best—it is a sound and healthy one, and it preserves the spirit and principle of local rule in local matters which never should be weakened. In view of this principle, of course there is no suggestion made now for the amalgamation of the Architectural Association of London with the Institute; and it is a wise resolve, for the association was originally established for different objects, and as we observed more than once, has been, and is still doing efficiently much useful work. There are other changes suggested, and which will be carried out, in addition to those we have mentioned, with a view to increasing the utility of the Institute, bearing upon the conduct of business, the meetings, and the reading and discussion of papers, improved library arrangements, and the improvement of the Institute building itself; but it is not necessary for us on this side of the channel to dilate upon these matters. We have noticed the principal and most important improvements, and if these are carried out in their integrity, and meet with recognition and support on the part of the general body, the position of the Institute will be greatly elevated in the public estimation, and with it the profession. The value of good rules lie in their enforcement without fear or favour, irrespective of creed, class, or rank.

The question of the direct affiliation of provincial societies with the London body being now at an end, it is to be hoped that a little more energy will be infused into some of the latter. In respect to this country we do not know what we can well say of the Irish Institute, and the younger Association. For all practical purposes latterly, many are of opinion that both might be considered dead, there are such little signs of life from the head quarters of either. The Belfast Architectural Association, which looked for a while a promising infant, died in a fit of violent convulsions. The Institute is sinking for a long time, under what we fear may prove an incurable consumption; and the Architectural Association of Ireland is prostrated with cold, a stagnation of blood, and a combination of other diseases of a complex and alarming nature. We are sorry we are compelled to write these words, for no matter how the truth may be disguised, as matters stand at present the capital of Ireland has no fitting representative architectural institution.

#### THE ARYAN ORIGIN OF THE GAELIC RACE AND LANGUAGE.\*

PHILOLOGY as a science has still a wonderful future before it. Though still in its infancy the infant Hercules has strangled powerful enemies in the shape of prejudices that beset its path. Churchmen as well as laymen, for long centuries, influenced by assertions made by authors of undoubted ability, have retarded

the progress of philology. The fathers of the Church, by holding the belief that the Hebrew was the ancestral language of mankind, and that from it all speech must have been derived, of course placed great obstacles in the way, for what they preached was accepted for centuries as incontrovertible truths. When facts began to be accumulated, fallacies had to give way, and it is a cheering sight to see in our own day divines as well as laymen foremost in acknowledging the truths that the science of philology is bringing the light.

There are churchmen, of course, still in our midst like Dr. Cumming, who assert "that Hebrew is that magnificent mother tongue from which all others are but distant and debilitated progenies," but scholars can afford to let those men preach and prophesy to their hearts' content. Speaking of the above named individual, a late encyclopædic writer truly observed: "If we could push back this divine to the 4th or 5th century we should be placing him in his proper chronological position as far as chronology is concerned. Leibnitz, who was a contemporary of Newton, wrote, that there is as much reason for supposing Hebrew to have been the primitive language of mankind as there is for adopting the view of Goropius, who published a work at Antwerp in 1580, to prove that Dutch was the language spoken in Paradise. The same high antiquity was claimed for the Gaelic language by the noted Allister McDonald or Donnell; but this nonsense aside, it is sufficient for us to know that Irish Gaelic is at least four thousand years old, and quite as venerable as Greek, Sanscrit, or Latin. Professor Blackie—no mean authority, either on Greek or Scotch Gaelic—wrote not long since: "Originally the Aryan tongue was the language of the leading classes on the high table land of Persia, who at length divided—one half (at different periods) going east into Hindostan, and the other west into Europe. Gaelic, therefore, as the earliest in her migration westwards, was one of the oldest branches of this family."

Canon Bourke agrees generally with the views expressed by Professor Blackie as to the antiquity of the Gaelic and its affinity with the Sanscrit, though he is opposed to him in one particular point as to the proper pronunciation of the word Celtic, the Canon holding that it should be *Keltic* and the Professor Celtic; but of this perhaps hereafter.

"The primary result of the study of Ireland," writes Canon Bourke, "as a branch of the science of philology, is to lead the student to the conviction that the first immigrants who made Eire their home had come from the East, and that the language which they spoke was Aryan, identical at that early period with the tongue known and spoken in the valleys of Persia, and eastward to the banks of the Indus. A knowledge of this lost language has been obtained by the labours of men of science, much in the same way as one could form a Latin speech from the six living Romance dialects, if it were possible that Latin, like Cornish or the Etruscan, or Aryan, had died out. The newly efformed Latin tongue would, like a broken vase remoulded, be similar in many respects to the original defunct Latin language. In this way, the last primitive Aryan tongue has been re-constructed, a grammar written, a dictionary compiled. This revived language could well be styled a Japhetic, or the

tongue spoken by the descendants of Japhet, in contradistinction to the Semitic spoken by the children of Sem, and which is the mother tongue of Hebrew, Chaldaic, Syriac, Arabic, Samaritan, Ethiopic, and old Phœnician; while the Aryan or Japhetic is the parent tongue of Sanscrit, Keltic, Greek, Latin, Gothic, Slavonic—nigh every dialect in Europe, and in parts of Asia where the descendants of Japhet took up their abode." Canon Bourke throughout his work cites conclusive testimony in abundance to prove his case, not only as to the Aryan origin of the Gaelic race, but of the language drawn from comparative grammatical analysis with dialects the offshoots of the primitive Aryan speech. Ireland is indeed under many obligations to German philologists in the present century, and to some Englishmen; but before Grimm, Zeuss, Bopp, Ebel, Schleicher, Pritchard, and Max Müller sank their deep shafts, close affinities were pointed out between Greek, Latin, Sanscrit, Irish, and other Asiatic and European languages. There are papers by Sir William Jones, among the "Asiatic Researches," that deserve, in our opinion, more notice than they appear to have obtained. Jones, though born in London, was Welsh by name and descent, his father being a native of the Isle of Anglesea, and no doubt the eminent oriental scholar and Indian judge had both a love for his mother tongue, and a knowledge of it.

In 1784, Sir William Jones was principally instrumental in forming the Asiatic Society at Calcutta, and gathering around him a number of men versed in the knowledge and language of the Brahmins. No one of scholarly attainments could have read the papers of Jones and his colleagues in the volumes of the "Asiatic Researches," published towards the close of the last century, without noticing the extraordinary similarity and absolute identity in some instances of the grammatical forms of Greek, Latin, and Sanscrit. Surprise certainly was felt by some divines and scholars in England at the time, but neither philosophers nor divines, nor clerical scholars, were ready or anxious to agree with the deductions or conclusions to be drawn from the new discoveries. Sir William Jones, had his life been spared for some years longer, would have carried his conquests far and wide in the virgin fields of philological science; but as it was, his investigations were deep, clear, and logical, and even when his opinions were only conjectural, he was often treading the right path. As a pioneer worker his labours deserve to be noticed and appreciated by German, British, and Irish scholars and philologists. In his discourse "On the Hindoos," to be found in the "Asiatic Researches," 1786, he argues that the Mahomedans found the people of Hindustan proper speaking a language, the parent dialects of which were current in the districts round Agra, which is commonly called the idiom of *Vraga*. Five words in six perhaps of this were derived from Sanscrit, in which books of religion and science were composed. But the basis of Hindustani, particularly the inflexions of the verbs, differed widely from these tongues.

In considering the general effect of conquest upon languages, it was Sir William Jones's opinion that the pure Hindu was primeval in Upper India, into which the Sanscrit was introduced by conquerors from other kingdoms in some very remote age.

\* "The Aryan Origin of the Gaelic Race and Language; The Round Towers; The Brehon Law; The Truth of the Pentateuch." By the Very Rev. Ulick J. Bourke, M.R.I.A. Second Edition. London: Longmans, Green, and Co.



And now listen to what the great oriental scholar writes of Sanscrit, which may be called a sister to the Irish Gaelic. The Sanscrit, he says, is a wonderful structure—more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to each a stronger affinity in the roots of verbs, and in the forms of grammar, than could be produced by accident—so strong, indeed, that no philosopher could examine them all without believing them to have sprung from some common source. Sir William Jones further adds that there is a similar reason for supposing the Gothic, Celtic, and old Persian to have had the same origin. The above opinions, expressed nearly a century since, anticipated much of what has since been expressed by German philologists.

In quoting Zeuss, Canon Bourke remarks: "The Greek language is one of the richest and the most prolific that has been spoken by man. Latin has never been surpassed for fullness, and for beauty and variety of forms. Nevertheless, Zeuss, a German scholar, fully aware of the richness and copiousness of those classic tongues, says of Irish-Gaelic that it does not yield; it is not inferior to the Sanscrit, Greek, or German; and that it is far and away before Latin and Slavic in its ready facility for forming compound terms."

In the conclusion of his discourse "On the Persians," and the ancient languages and characters of Iran, Sir William Jones makes some shrewd remarks. This paper is also in the "Asiatic Researches" (1789), and on the whole it would repay perusal. He shows that a powerful monarchy was established in Iran or Persia long before the Assyrian or Pishdadi government; that it was in truth a Hindu monarchy, though he says if any one chose to call it Cusian, Casdean, or Scythian he should not enter into a debate on mere names; that it subsisted many centuries; and that its history has been engrafted on that of the Hindus who founded the monarchies of Ayodhya and Indraprestha; that the language of the first Persian empire was the mother of Sanscrit, and consequently that of the Zend and Parsi, as well as of Greek, Latin, and Gothic; that the language of the Assyrian was the parent of Chaldaic and Pahlavi; and that the primary Tartarian language also had been current in the same empire, although as the Tartars had no books or even letters their unpolished and variable idioms cannot be traced with certainty. We discover, therefore, he says, in Persia at the earliest dawn of history the three distinct races of men (whom he described on former occasions) as possessors of India, Arabia, and Tartary; and whether they were collected in Iran from distant regions, or diverged from it as from a common centre, he thinks can be easily determined by the following considerations:—

"Let us observe, in the first, the central position of Iran, which is bounded by Arabia, by Tartary, and by India, whilst Arabia lies contiguous to Iran only, but is remote from Tartary, and divided even from the skirts of India by a considerable gulf, no country, therefore, but Persia seems likely to have sent forth its colonies to all the kingdoms of Asia. The Brahmins could never have migrated from India to Iran, because they are expressly forbidden by their oldest existing laws to leave the region which they inhabit to this day; the Arabs

have not even the tradition of an emigration to Persia before Mahommed, nor had they indeed any inducement to quit their beautiful and extensive domain; and as to the Tartars, we have no trace in history of their departure from their plains and forests, till the invasion of the Medes, who according to etymologists were the sons of Madai, and even they were conducted by princes of an Assyrian family. The three races, therefore, whom we have already mentioned (and more we have not found) migrated from Iran as from their common country. And thus the Saxon Chronicle, I presume from good authority, brings the first inhabitants of Britain from Armenia; while a late very learned writer concludes, after all his laborious researches, that the Goths or Scythians came from Persia; and another contends with great force, that both Irish and old Britons proceeded severally from the Caspian: a coincidence of conclusions from different media by persons wholly unconnected, which could scarce have happened if they were not grounded on solid principles. We may, therefore, hold this proposition firmly established—that Iran or Persia in its largest sense was the true centre of population, of knowledge, of languages, and of arts, which, instead of travelling westward only, as it has been fancifully supposed, or eastward, as might with equal reason have been asserted, were expanded in all directions to all the regions of the world in which the Hindu race had settled under various denominations. But whether Asia has not produced other races of men distinct from the Hindus, Arabs, or the Tartars, or whether any apparent diversity may not have sprung from an intermixture of those three in different proportions, must be the subject of a future enquiry."

We thought it as well to quote the above views of Sir William Jones, expressed at a time long interior to those chiefly relied upon in Canon Bourke's work. It will be seen that Jones was performing admirable pioneer service; and though he may have erred in some of his conclusions, his untiring industry enabled him to amass several facts which have since been acknowledged as forming the groundwork of the modern science of philology.

As to the Aryan origin of the Gaelic race and language, we think that there can be no doubt on that point. Such close affinity has been proved to exist between the Sanscrit and the Irish Gaelic and cognate tongues, the former must offer an interesting and enticing field for philological inquiry and research.

#### FAMILIAR CHAPTERS UPON SCIENCE.\*

(Continued from page 19.)

##### NO. III.—CLIMATIC CHANGES.

MODERN scientific discoveries have satisfactorily proved that in past ages the climate of all Northern Europe, Northern America, and Asia has been subjected to repeated change. Trees once flourished where glaciers have now invaded parts of Greenland; coal is found in quantity in Melville Island; and fossil elephants' tusks (preserved in frozen soil for innumerable ages) form a marketable product in Siberia. In Europe at one time a sea of ice of such magnitude existed, that the glaciers of Scandinavia were in connec-

tion with those of Scotland, England, and Ireland, and this mighty *mers de glace* actually obliterated the Hebrides and all the smaller northern islands. Such a scene of Arctic panorama now only is witnessed in the Polar regions; but gradually it changed until the temperature became milder, and yet more mild, and at length a southern, almost tropical summer pervaded perennially and for ages throughout these islands. The lion, the tiger, the hyena, the elephant, and the hippopotamus became acclimatised in Britain, which was at this period united to the Continent (and by this means they migrated thither), where the Straits of Dover now separate them. Long, long periods then elapsed, the summer sun declined in its warmth, the winters grew more severe, the existing mammalia either emigrated southwards, or died out from the increasing cold, and in lapse of time as glacial temperature prevailed, were succeeded by the Polar bear, the reindeer, and other Arctic animals. Once more these islands were formed into a sea of ice and snow. How many of these climatic changes occurred is not within present geological knowledge; but at least one more mild interglacial period supervened, when the sea slowly gained upon the land, until the greater portion of Great Britain and Ireland was submerged under its influences. Gradually the land was partially re-elevated, and after another period clothed as before with a hoar mantle of ice, until it was once more united by a frozen sea with the Arctic regions. Again, the temperature becoming more mild the glaciers diminish, and their places are occupied by the sea, until they exist only in mountain hollows and glens, the land at this period is slowly being re-elevated, and the moving masses of floating ice are kept continuously grinding, rubbing, and polishing the giant masses of rock over which they are kept in motion by the process of thaw, thus producing the *roches moutonnées*, and the grooves and striations, which are observable in mountain regions, these enormous rafts of ice holding within themselves innumerable blocks of boulder rock, carrying with them their own graving tools, striating and polishing as they slowly move along. And how are all these climatic changes proven to be true? may well be asked. Simply by the existing animal remains discovered in bone caves, and by fossils in numerous places throughout the British Islands. The elephant, the lion, and the tiger could not exist in an Arctic climate, no more than the Polar bear, the reindeer, and the moose deer could in a southern. Yet these all occur in different deposits. The seams of coal which pervade these islands could not have been produced unless under a tropical sun, and millions of tons of Arctic shells could only have been deposited near the summits of the highest mountains, except by natural agencies. Therefore all these tell their own tale, and explain away what otherwise would be unintelligible.

The glacial and interglacial periods—which must have lasted for unknown ages, of which no computation of time can possibly be made, form the most interesting epochs in the history of this earth—the evidences regarding them must, as a matter of course, be altogether circumstantial; but modern discovery in cave deposits, &c., has, however, unveiled what would otherwise appear deeply mysterious—almost incredible,—and has tended to dispel all doubt with regard to these eventful ages. I have endeavoured, perhaps too summarily, to relate them, and in doing so, I acknowledge myself indebted to Lyell's "Antiquity of Man," Geikie's "Great Ice Age," Croll's "Climate and Time," and Lyell's "Geology," for the information conveyed in this chapter.

\* By William Hughes, author of "Geological Notes of Ireland." Dublin: M. H. Gill and Son; W. H. Smith and Son. 1876.



## THE ROYAL HISTORICAL AND ARCHEOLOGICAL ASSOCIATION OF IRELAND.

THE quarterly meeting of this association was held on Wednesday, the 4th inst., at the Museum, Butler House, Kilkenny. The chair was occupied by Barry Delany, M.D.

The Rev. James Graves read the following letter from the private secretary to the Lord Lieutenant:—

SIR,—I am directed by his Grace the Lord Lieutenant to request that you will be so good as to inform the Royal Historical and Archæological Association that it will afford him much pleasure to be enrolled on the list of its Fellows and to become one of its patrons.—P. B. BERNARD.

His Grace was unanimously elected.

The Rev. Mr. Graves said that he had also received an intimation that the Chief Secretary for Ireland would become a member. Though he (Mr. Graves) had not authority for putting the name forward, he was informed by Lord Courtown that Sir Michael Hicks Beach would wish to become a member, and he supposed they would have his name by the next meeting.

The following were elected Fellows—The Earl of Limerick and Mr. E. Dwyer Gray.

The following members took out Fellowships—J. Blair Browne, D. Fearon Rankin, B.A.; Dr. W. H. Stackpoole Westropp.

The following members were elected.—W. O'Brien, LL.D., James Greene Barry, Rev. D. O'Connor, R.C.C., John King, Charles Dawson, Dr. O'Leary, J. Pigot, Miss Bernard, Earl of Egremont, Miss Leslie, Capt. R. T. Burrows, Right Rev. Dr. Warren, Dr. Clarke, and Richard Colles, B.A.

The hon. sec. laid on the table copies of the "Transactions" of kindred societies and of other periodicals, which had been presented to the association. Mr. Wakeman, the active local secretary at Enniskillen, presented rubbings of ancient Irish inscribed tombstones at Kilcoo, on the borders of Fermanagh and Monaghan.

Mr. Robertson exhibited drawings of the two fronts of Shee's Almshouse, taken from an old sketch of his own by his son Mr. Wm. Alexander Robertson, and in one of the sketches the "hood" over the door was shown.

Mr. Langrishe exhibited a sketch by himself of a font at Leskinferc or Clogh (from Mulrankin), Co. Wexford, showing the elevation, the base, and the bowl.

The hon. sec. next read some documents connected with Kilkenny in the olden time; one (the original of which is in the Public Record Office, London) was as follows:—

*To His Highness Oliver Lord Protector of  
England, Ireland, and Scotland.*

The humble petition of the Justices of Peace, gentry, and other inhabitants of the city and county of Kilkenny in the Dominion of Ireland.

Sheweth—That whereas the Government of the city of Kilkenny lately in the hands of the Irish hath been forfeited by the late rebellion, and having both by our own experience and by the concurrent opinion of the wisest in all ages found that cities and corporations are both honourable and profitable to the Commonwealth wherein they are situate, and it being well known that Kilkenny both for ayre, situation and buildings is little inferior to any towne in the Irish nation, and for advancing manufacture well accommodated, and for as much as the late Lord Deputy Ireton hath often declared that if he lived he would endeavour to have bestowed upon Kilkenny such privileges and immunities that he hoped would make it as flourishing a city as most in England, or words to that effect, which we humbly conceive if he had lived he would have attempted to have effected the same, but seeing Providence had given us good hopes of restoring and settling the just honor and freedom of civil authority in the said nation, and considering our own grievances by reason of the remoteness of administration of justice, and also the ruins of the said city by the decayes of the walls, streets, bridges, &c. Your petitioners therefore most humbly pray your Highness to restore unto them all the privileges, franchises, immunities, and revenue which lately were belonging to the said Corporation by the former charters granted by severall Princes which your petitioners have ready to offer, and what other additionall privileges, immunities, or emoluments your

Highness in your grave wysdom shall thincke requisite for the encouragement of your petitioners in your replanting and establishing of the said city. And that which moves us to be more humbly earnest is the daily cries of the country, who are much oppressed by the unjust taxation of some turbulent and litigious spirits, who taking advantage by the remoteness of the Courts of Justice in Dublin, are ready to afflict and oppress the poore with many tedious and vexatious suites, for prevention whereof wee humbly implore the renewing of the said charter, that soe your petitioners and the parts adjoining may be eased from the exceeding burden of tedious and costly journeys, and that thereby the said city may be kept in such due and honorable repaire as formerly it had been, which we hope alsoe will be a good meanes for the speedy replanting of the country round about it. And your petitioners as in duty bound, &c.

[Here follow twenty-nine signatures.]

There are (said the hon. sec.) very few documents in existence relating to the history of that period. One curious one related to the exiled Irish Kilkenny citizens who were expelled to Ballinakill, and that document was amongst Mr. Bryan's muniments at Jenkinstown. They petitioned for mercy and consideration, and spoke of his (Cromwell's) clemency. In the Langton history, so well edited by the late Mr. Prim, it was stated that the Irish were compelled to retire to Ballinakill.

A paper by Dr. Martin, of Portlaw, was read on the question, "Was James II. ever in Waterford?" The paper stated that there is a black table at Bessborough, the seat of the Earl of Bessborough, presented to him by the late Rev. Wm. Dobblyn, of Clonmore; and it has been a tradition in the family of Mr. Dobblyn that King James II. sat his last dinner in Ireland off this table, on the occasion of his passing through in haste from Dublin to Duncannon. This tradition the author proved to be unfounded.

The Rev. Mr. Graves said that King James was in Kilkenny after he landed; when fleeing to Dublin from the Boyne he left Kilkenny to the right.

A paper was read from Sir Denham Norreys on the mode of constructing the Celtic trumpet in the museum of the Royal Irish Academy, particularly in reference to the rivet work.

Several other contributions were read, and votes of thanks passed.

## ART EDUCATION AT HOME AND ABROAD.

THE Government lately instructed its diplomatic agents to make enquiries how Fine Art was encouraged in those countries to which they were accredited. A preliminary report has been issued, from which we learn that little Baden gives £500 in aid of art; Copenhagen has fine art galleries, professors, and students, at home and abroad, at the expense of the state. The academy has a capital to the amount of £13,000, and a yearly subsidy from the government of £2,800, in addition to fees of 165 pupils, while the art collections of the royal palaces cost the nation £766. In Austria drawing is taught in every national school as an indispensable branch of public education. Wurtemberg spends large sums, supporting technical schools and colleges for workmen, where they learn the principles and practice of art, as well as the principles of their trades. Bavaria gives £29,000 yearly in aid of Art, in addition to the large sums which the King and other monarchs expended in collections for galleries and museums. Greece has not yet given much, but she is about doing so. Greece for a long series of centuries has been living in the glory of her art of the past. Holland has some good art galleries and museums. Art in Switzerland is represented by what is done in the cantons. Russia has schools of art at Moscow, but latterly the warlike tendencies of that country prevent much from being devoted to art purposes. As to France the present report gives no information, although it is known that considerable sums have been expended in the encouragement of art in that country. Prussia appears to be in advance

of most Continental countries in the sums spent on galleries, museums, schools of art, science, music, and the drama. In 1862 there was set aside 747,525 marks for those purposes, and in 1876 the estimate for the same object was 5,480,984 marks. Each mark is about a shilling.

It will be seen by what is stated above the extent of the liberal encouragement given to art education abroad. Art instruction is certainly more advanced on the Continent than in the British Islands. South Kensington absorbs large sums yearly, and it must be allowed has scattered schools broadcast throughout the country; but the South Kensington Department has not, through reasons that are better understood than described, eminently succeeded in its labour. The odour that attaches to the Department is likely, however, to wear off in time, for it has devised a system of art training that must be productive of good. It is scarcely necessary to add that we have at present art galleries and museums in many cities and towns in the three kingdoms, and Royal Academies in London, Dublin, and Edinburgh. Our schools of art are also yearly increasing, and we have no doubt that, with a little more liberal encouragement on the part of the Government, and by the assistance of the wealthy patrons and lovers of art, the three kingdoms will in a few years favourably compare with those on the Continent. Technical education and art instruction must advance with equal steps, if a great success is to be obtained; and we trust that our Dublin and provincial Art schools will still continue to progress in the future as they have in the past.

## THE NEW METHOD OF LAYING WOOD PAVEMENTS.

Mr. Samuel Robinson, of Westland-row, in this city, has taken out a patent for improvements in the construction of wood pavements, which improvements embrace a new method of constructing and laying tram rails, &c. The invention is also applicable to floors consisting of wood and concrete made in any geometrical form, and comprised of timber blocks of any description that may be required. We omit the description of its application and the constructive details in the absence of a diagram or diagrams, whereby the methods would only be clearly understood. The new method appears to possess some features worthy of notice and of trial. We understand that Mr. Robinson has got leave from the Corporation to lay down a specimen of his new pavement near his premises in Westland-row, so the public will soon have an opportunity of testing the value of this new invention.

## THE ROYAL GEOLOGICAL SOCIETY OF IRELAND.

A GENERAL meeting of the society was held on Wednesday evening, in the Lecture Theatre of the Royal Dublin Society. The president, Rev. Maxwell Close, in the chair.

A paper was read by Mr. Joseph Nolan, M.R.I.A., Geological Survey of Ireland, "On a remarkable Volcanic Agglomerate near Dundalk." Dr. Haughton having criticised the paper at some length, said he would take the opportunity of placing on record his opinion that the field geologist ought to be followed by the field chemist in the investigation of igneous rocks such as those referred to in the paper. It was a great defect in the Geological Survey, both of Ireland and England, that the services of the chemist had not been brought into requisition. That had not been the case either in the United States or in Canada. He hoped that ere long they would send a chemist attached to the Survey.

Mr. G. H. Kinahan, M.R.I.A., read a paper on "Esker Sea Drift."

Mr. E. T. Hardman, F.C.S., read a paper on "A Triple System of Post Miocene Faults in the Basaltic Region round Lough Neagh."



## LECTURES ON ARCHITECTURE.\*

(Continued from page 88.)

LAST session, I asked you to give some consideration to the domestic architecture of the ancients, to their hearths and homes, and to the details of their everyday life. Fortunately for us, there exist abundant materials for the study of this question in the ruins of Pompeii and Herculaneum. We saw there how the Romans followed Greek precedents, although with important differences introduced by themselves, both in ornamentation and construction; Pompeii being almost a Grecian city, having been originally founded by colonists from Greece. This peculiar circumstance does not, however, wholly account for the prevalence of Greek traditions to be seen in the ruined cities, for the plan of the houses there adopted was common with the Romans in every part of their extended empire, and was not without influence, as we may hereafter have occasion to recognise, in the far-away land of the then savage Britons.

When we come upon the traces of Roman work in these islands, we find that the proud conquerors of the world, in crossing the seas, and changing their sky, had not lost that spirit of allegiance to the customs of Imperial Rome which distinguished all their life, whether public or private. Here at the extremity of their vast organisation, the pulse may have beaten feebly, but it was in unison, nevertheless with the stronger impulses of Rome itself. We seem, indeed, while noting the slender architectural remains of Roman work, now and again discovered amongst us, to witness the last expiring effects of that wonderful civilisation which could do much, but not all; which could inculcate the virtues of the patriot and the citizen, but which needed the vivifying influence of a purer faith to bring out the duty of man to man, with all its far-reaching consequences, social, political, and architectural.

The later Roman did not adopt forms from his conquered enemies. He rather imposed his own upon them; and this, not only in regard to details, but also as to principles of design. He followed Greece indeed, but he added ideas of his own, and had imperfect sympathy with the beautiful execution, and the fastidious delicacy of refinement in which the Greek architects delighted. With the semicircular arch came the frequent use of curved and circular forms in the plans and sections of buildings. Thus, the basilicas, as you are aware, had frequently semicircular ends, or apses, which proved the forerunners of the choirs and chancels in Christian churches. In the splendid ruin at Rome, known as the Temple of Peace, you further see in its curved and vaulted roofs the application of the arch to the transverse sections of such buildings. The perfection of the application of this principle was, of course, the dome, the crowning glory of Classic architecture. The Romans, while starting from Greek art, added to its forms, changed its decoration, and which, gaining freedom, lost in purity of taste. The use of the arch enabled them to exercise greater boldness in construction, and the massive ruins of their baths, aqueducts, and public works, have justly excited the admiration of succeeding ages.

The decay of Roman architecture was sudden and complete; and when we take leave of Pompeii, and of the tawdry finery of the debased and falling empire, we come upon a period of pause and interregnum, out of which issued the glories of Mediæval art.

In prosecuting our inquiries into Mediæval art, and comparing it with its Roman precursor, it must be remembered that in the case of Pompeii and other ruins, we have examples of a far older civilisation than that of the twelfth century, which we are about to discuss. Pompeii was destroyed as early as A.D. 79, and it is interesting to trace in its remains principles of design and arrangement which we shall come upon elsewhere in our

investigations of the architectural works of the Goths. Thus, the atrium, the distinguishing feature of the Roman house, foreshadowed, in some respects, the hall of northern climes. Here, as in a public place, the Roman Patrician received his dependents, and transacted business. Around it were grouped the cubicles, or separate bedrooms, the private apartments, and the women's chambers, an arrangement far in advance of the domestic provisions of the Saxons and Normans in this country. Although, in the later days of the Roman Empire, corruption of manners had led to profusion and extravagance, the Roman gentleman had, at least, inherited maxims of moderation and frugality, and his domestic arrangements give no indication of the rough and profuse hospitality which prevailed in Mediæval times. The atrium might serve many of the same purposes as a Gothic Hall, but the modest dining-room of a Roman house, with its triclinia for a few friends, or members of the family, bore no resemblance to the Gothic banqueting-room, with its roaring fire, its wassail bowls, and its miscellaneous assemblage of roysterers. He had, moreover, no reason to surround himself with walls and battlements, or to keep bands of armed retainers in his train. A free citizen of a free country, he reaped the advantages of a settled Government and well-ordered system of public affairs, in which it was his right to take part.

All the circumstances of the life of the day have left their effects on the architecture of Pompeii, as I attempted to describe to you last year. We saw then how much the Romans lived in public, in their temples, in the Forum, the basilicas, the theatres, and the public baths, noting, at the same time, the spirit of cruelty which lurked beneath the varnished surface of Latin civilization. This was the spirit which delighted in the sufferings of gladiators, and stained the arena of many an amphitheatre with the blood of Christian martyrs. It was one of the many signs that the olden glories of Rome were gone, and that the time was come for a new and purer system. This was arrived at, as you know, through bloodshed and disaster. The barbarians who conquered the great empire of the world, were no gentle reformers, but they nevertheless laid the foundations of mighty and beneficent changes, the consequences of which are even now scarcely exhausted. I only claim your attention, now, for a small part of these changes, as they have affected architecture; but I purpose to ask you to continue the inquiry which I initiated last year, into the domestic architecture of our ancestors.

Leaving, therefore, the works of the Greeks and Romans, we shall turn our attention to our own country, and endeavour to trace the various steps which were taken by our forefathers to provide themselves with handsome and comfortable dwellings. This inquiry is not unattended with difficulty. Mr. Parker, in his admirable works on domestic architecture, has brought together a mass of valuable information, of which I shall gladly avail myself; but we cannot expect to find as many materials for our present purpose as those which exist so richly around us, in connexion with ecclesiastical architecture. This branch of the subject has been so fully discussed of late years that it may, perhaps, be desirable to leave it for awhile, and turn our attention to the scarcely less interesting questions which I have indicated. The study of domestic architecture has, indeed, as suggested in my introductory remarks, a special interest in these days, when the spread of manufactures has led to the aggregation of multitudes in our great towns and hives of industry. We recognise, as one of the chief problems of our time, the urgent necessity of providing healthy homes for the people. Can nothing be done to bring to bear upon those the light of beauty and art? This is the difficulty with which artists have to contend, and though we cannot get from our predecessors any absolute instruction on the subject, we may, at least, endeavour to profit

by their experience; to study the principles on which they worked; and to consider whether they may not serve as lights to our path. Not that we are to suppose that they were always successful any more than ourselves. Their difficulties, moreover, were not ours, and we utterly misread the lessons of history if we do not bring to bear upon them the freedom from prejudice, the patience, and the common sense which, with the stores of information now at our command, we in the nineteenth century, are bound to cultivate.

We find at the outset of our investigation that the Romans certainly did not bring these qualities to bear on their domestic architecture in this country; for, as far as we can tell, the plans of their dwellings here did not materially differ from those in Italy. These, again, were almost copied, as we have seen, from Greek plans, suitable only for a hot and dry climate. Even in Italy such an imitation must have led to inconveniences, and it is difficult to imagine anything more uncomfortable, in a northern climate, than a Greco-Roman house, transplanted from the banks of the Ilyssus or the Tiber. Take, for example, that important part of it, the atrium, to which I have just referred. This was open, as a rule, though often temporarily protected, and sometimes, but rarely, crowned with a permanent roof. Necessity must have prescribed the latter arrangement for dwellings in this country; but, in other respects, the distribution of parts, which the Romans had reduced to a system, was the same here as in other parts of their empire. The atrium, when covered in, and lighted by a clearstory, or by windows, may be regarded as the type of the hall, which became a feature in all considerable buildings in Mediæval times. The Gothic architects at first adopted the simplicity of construction in their works generally, which was a characteristic of Roman work. With a freer run of the arch came, later on, a boldness of construction, which the Romans never approached, a freedom which was, indeed, sometimes indulged in at the cost of solidity. Wherever we find traces of Roman modes of building, in this country, they are of a substantial character. The mortar, used very plentifully, and often combined with pebbles and small bricks as concrete, deserves special notice, as being the forerunner of a system of building now much used by engineers in those vast works which are entrusted to them, which may rival the colossal achievements of the Romans themselves. The qualities of concrete, the limits of its useful application for building houses, and the right method of treating it architecturally, are questions which the young architect will do well to study. The Romans obviously had great confidence in their mortar and concrete; they did not practise the art of moulding brickwork, and employed bricks, or rather tiles, but seldom in any great architectural work. The Roman brick, as we term it, is more like a paving tile than a brick, and is not more than an inch, or an inch and a half, in thickness. You will find it in most Roman works, and in a great many Anglo-Saxon and Norman examples erected during the eleventh and twelfth centuries. The materials used were much the same as at present, with the exception, of course, of what I may call the engineering development of iron, which it has been reserved for us to witness. Apart from this addition, the science of building has scarcely advanced from the days of the Ptolemies, and the modern builders have little to boast of.

We find in Saxon and Norman times masonry, plasterwork, timber, iron, lead, bricks, and, though sparingly, glass. Some of these materials were used in their simplest forms, but by a process of gradual improvement they each ultimately became an example of artistic progress, which, perhaps, culminated in the thirteenth century. The more solid constructions of masonry were at first reserved for important public works, such as castles and minsters, as, for example, Rochester Castle and St. Alban's Abbey.

\* By Professor Barry. Second lecture. Delivered at the Royal Academy on Monday, March 5th.



After the departure of the Romans, the Saxon invaders of Britain would naturally make the best they could of the buildings of which they became the possessors. With some modifications, therefore, the Roman houses, which then existed, became their dwellings. As repairs were needed, changes arose, the old houses would be altered or pulled down, and their more solid materials used elsewhere, a circumstance which often explains the presence of what we call Roman materials in buildings of a later date.

At a time when roads scarcely existed, the carriage of heavy articles must have been very costly and difficult, and our forefathers had, therefore, very good reasons for treating the Roman works about them as quarries. It was thus that the original structure of the church and abbey of St. Alban was built from the remains of the ancient city of Verulamium. The private houses were less fortunate. For them the expense of durable materials was too great, and the people had to live in huts of wood or mud, covered with reeds, thatch or shingle. In Saxon days there was little comfort or safety in single dwellings, and the common people were the "hearth men" of their lords, or thanes, around whom they clustered, and with whom they lived. The thane lived in a semi-patriarchal state, and not only shared his table with his dependents, but even his sleeping apartment. The hall, from its importance in the dwelling, gave the name to the whole structure. It was the direct successor of the covered Roman atrium, and, like it, was the central feature of the house. In it the lord and his dependents took their meals by day and their sleep by night. The master had, indeed, sometimes an apartment of his own, but even this was often shared by him with his principal retainers. Chimneys there were none, and when there was a fire it was lighted in the middle of the hall, and the smoke was left to find its way through a hole in the roof, or by other openings as best it could.

It was by slow degrees that these simple arrangements were improved. Houses were used for protection from the weather,—not as *homes* in anything like our sense of the word. They were the results of the simple requirements of a rough and hardy population, living much out of doors, and given to war and sports.

At the time of the conquest of Britain by the Romans, there is no reason to doubt that the latter found in these islands a race of active and vigorous people, well inured to hardship, and skilled in all warlike exercises. Some have thought that the introduction by the conquerors of luxurious manners and habits tended to enervate the Britons, and so to incapacitate them from maintaining their freedom in their subsequent struggles with other invaders. There is little doubt, however, that a hearty taste for field sports and manly pursuits has always prevailed in this country. Rowing, swimming, archery, hunting, wrestling, and such like pastimes, were common, and we have recorded, in one case, the following boast of a Saxon thane, named Kolson. "I know," he says, "how to play at chess; I can engrave Runic letters; I am expert at my book; I know how to handle the tools of the smith; I can traverse the snow in skates of wood; I excel in shooting with the bow; I use the oar with facility; I can sing to the harp; and I compose verses." It is not to be supposed, indeed, that such a list of accomplishments was common; but such a chronicle may serve to indicate to us what was the ideal aimed at in the education of a Saxon nobleman. His followers would naturally emulate his prowess in the sports of the field, though they would have no chance of imitating him in his knowledge of letters and other softer accomplishments.

From their simple mode of life the Saxons did not expect elaborate provision for their comforts. They gathered around their lords and were easily contented with food and shelter. The houses of the time were, therefore, of corresponding simplicity. From the perishable nature of their construction few remains are left by which we can determine

their architectural character. We can suppose that some of the greater thanes may have desired to display their importance by decoration, the woodwork may, therefore, have been occasionally carved with representations of the animals, fishes, and reptiles with which they were familiar from the sports of the field, and these may also have been painted and gilt, with a certain rude magnificence. Spoils from enemies would also grace the "hall," and encourage the armed retinue of the lord.

Gradually, as time went on, the hall would become more architectural, wooden posts gave way to walls of stone, and the thatched covering to more solid wooden roofs, covered with shingle, stones, or tiles. In the more important buildings, stone columns took the place of wooden posts, and semicircular arches carried the roof above, adding both to convenience and to architectural effect. The capitals and bases of the columns often indicated their Roman parentage, by a rough imitation of ancient forms. Windows became common, though glass was as yet too great a luxury for general use. The openings were formed by stones placed as lintels, and also angle-wise; were ultimately arched in, and at times carved and frequently decorated with the zig-zag ornament, which now came into use. Iron work was scanty, but some beautiful specimens of hinges, locks, &c., show us that the smiths of those days possessed both skill and taste. This was perhaps only natural among a warlike people, whose first cares would be directed to the manufacture, and after that to the decoration of their arms.

The Saxon houses followed Roman precedents, and consisted, for the most part, of a ground floor only. There may have been exceptions in the one case as in the other. That the Romans used an upper story we know, especially in cities; but the arrangement was unusual, and it was not until the twelfth century that it became common in English houses. We then find the buildings planned of a rectangular form, longer one way than the other, and divided into two separate storeys by a floor. The upper story was the hall, and the room under it was vaulted, and approached by a different entrance. The stairs to the upper story were, in early examples, arranged in flights outside the building. Afterwards the stairs were covered, and some of you may know the beautiful staircase at Canterbury of this description. Attached to the hall, and behind the dais, was the principal chamber, which was called "solar," or "sollere," a name supposed to be derived from "solarium," the word used by the Romans for the upper story or terrace, where the inmates went to enjoy the sun. It was only by slow and gradual steps that glass began to be used for windows, which were at first filled with canvas, or some such material, or closed only with shutters. The openings were small, and often mere slits in the wall. Inside they were splayed widely towards the apartment. Wooden shutters, internal and external, were fastened to the walls by iron hooks. In some instances they were hinged at the top of the window, and opened outwards, being kept open, when required, by props. The interior of the window was finished so as to form a stone seat; and when the wall was thick enough, double seats were contrived transversely, as is shown by one of the diagrams before you in the case of Aydon Castle.

In passing from Saxon to Norman work we find a gradual transition. The general distribution of the plan remained the same, while new and improved details took the place of more primitive constructions. The Normans may be credited with more fastidious tendencies than the conquered Saxons, but it was not at first that their influence became visible. The chief care of the conquerors was to secure their footing, and it was to military, rather than to domestic architecture, that they first devoted their energies. The Saxons had but few fortifications, an embattled wall surrounding their homesteads being the usual mode of exceptional protection of this nation. The

Normans, however, soon indicated the nature of their tenure of the country by the erection of strong fortresses, with towers, walls, and gateways, recalling the structures of their own country, rich in all the resources of military architecture. In these castles nothing was neglected to give them strength, so as to enable them to stand a siege, whether they were attacked by the subject population or by rival lords or rebels.

In some of the later examples are found chimneys of good design, and even mangers for the horses, massively constructed in stone. As regarded houses, however of small importance, the Normans followed the customs of the country, and building in stone was a rare and costly exception to the general rule. Their style, which is familiar to most of you, is based on the Romanesque, an imitation, more or less, of the forms of old Roman art. Their work may be roughly described as that of the twelfth century, during which the principal Norman buildings in this country were executed. If the remains of their domestic architecture are scanty, we must remember that the latter can only flourish in times of tranquillity, and public order was at this time far from secured. The house of the great lord was, in every sense of the word, his castle. Within its walls and around them, dwelt a motley host of armed retainers, scorning commerce and the arts of peace. The tillers of the soil lived in huts, and if some few Saxon thanes kept up a sort of independence, it was but fitful and rare, and the Norman influence retained throughout the country its hardly won predominance. At Windsor, Rochester, Norwich, Pevensey, and many other places, you may find specimens of the work of this time, illustrating the military architecture of the Normans.

In respect of domestic work, we find the hall continuing to dominate the plan. It was the general living-room as before, and the occupants often slept in it. Adjacent chambers gave, in important cases, the additional convenience of separate sleeping-apartments. The Latin of the period gave the title of "aula" to the great room, and the palace of the sovereign was known as "aula regis." By the French, the room was styled "salle," and the Romans naturally brought this designation with them. From these names, the transition is easy to our own word "hall," which in time came to be applied not only to the principal room, but to the house itself of an English nobleman or gentleman. As you are aware, it still remains the rule in many parts of the country, as, for instance, in Lancashire and Cheshire, where every country-house, of any pretensions to importance, is termed a "hall."

The halls of later time were often of great magnificence, and were sometimes on a grand scale, as at Westminster. The roof was frequently supported by posts of wood, or by columns and arches of stone. In certain cases, these supports were in the centre, and supported the ridge of the roof. More frequently, however, they were placed at the side, adding an aisle or aisles to the great room. The kitchen was in a separate building, often detached. The culinary arrangements were not elaborate, and were often performed in the open air. This will appear a natural arrangement for the rough cookery, which piqued itself on roasting oxen whole, and indulged in similar achievements, remarkable rather for magnitude than delicacy. A courtyard separated the kitchen from the hall. Around it were grouped the subsidiary apartments, for larder, buttery, scullery, &c., and the dinner was taken across to the hall, through the open air. In some buildings the kitchen and buttery adjoined the hall, very much as we now see them in the college halls of Oxford and Cambridge. In such cases there was often a vestibule, or entrance corridor, cut off from the hall by a screen according to the arrangement which is still familiar to us in those examples. The kitchen and buttery would thus open into the vestibule, and the inconvenience of carrying the dinner through the open air was avoided.



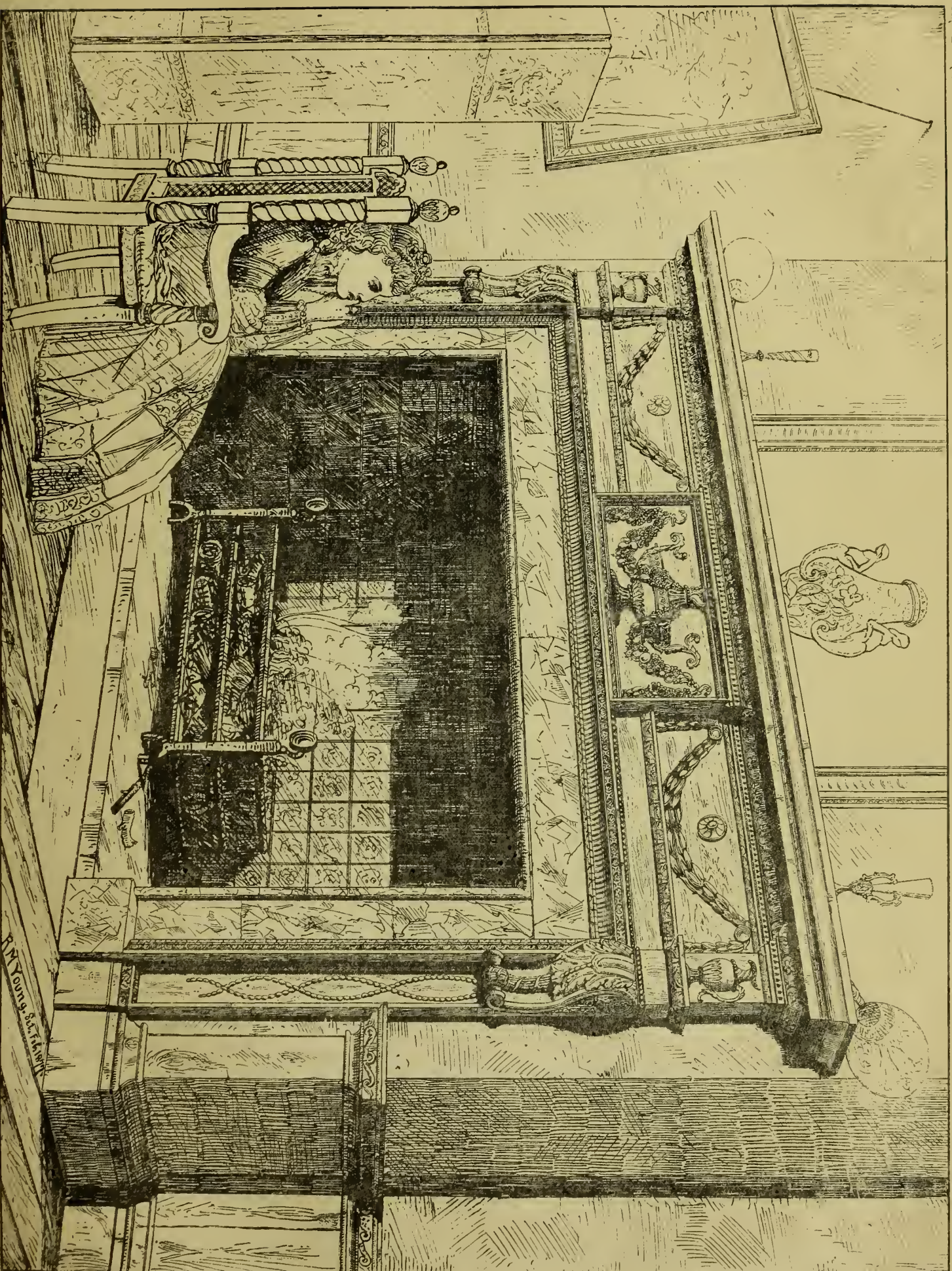


Photo taken by The Lady Penning Camp

QUEEN ANNE CHIMNEY-PIECE IN THE ROOKERY, STANMORE, MIDDLESEX.

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The plans above described were, as far as we know, the usual arrangements of the domestic buildings of the Normans. The hall of the sovereign differed in magnitude, rather than in general design, from the manor-house of his lords and vassals. Some halls were, of course, more magnificent in adornment than others, but all seemed to have had the same essential features, and the type, thus adopted, has influenced the plans of our English houses during the succeeding centuries. The great hall is now, indeed, the luxury of the rich, in modern domestic buildings, but this arises from the love of privacy which has distinguished later times, and from the consequent preference of comfort and convenience, to the ruder, if more stately, arrangements of ancient days.

(To be continued.)

### QUEEN ANNE CHIMNEY-PIECE IN ROOKERY, STANMORE, MIDDLESEX.

THE drawing-room chimney-piece of which our illustration is a sketch, is an interesting example of early eighteenth-century work, some specimens of which are still to be found in Ireland. The carving (which has been finely executed, apparently on deal), is said to be the production of a pupil of Grinling Gibbons; however this may be, it is evidently of the same school. The door and window heads in the same room are still more elaborately carved with festoons of fruit and foliage, marine animals, &c. The marble shown within the woodwork is a richly variegated Siena separated from the opening of fireplace by a moulding of Sicilian. The fireplace is at present occupied with a modern grate, whilst the other fittings of the house are in the same style, so far, as they remain intact. The exterior presents no point of interest. The house is at present in the occupation of A. Fitzgibbon, Esq., M.R.I.A., by whose kind permission the sketch was taken.

### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

SHERIDAN reads—

"I am sorry to find that party has become so universal in Dublin, as to make its appearance visibly on the stage; I am sure that is a most improper place for it, on which account I think it my duty to lay before you the rule by which you ought to act at this juncture. I do not pretend to dictate to you in your private capacities; every man born under our happy constitution has a right to think as he pleases, and speak his sentiments, provided they are not repugnant to the laws of the land and the rules of civil society. In your theatrical character I have an undoubted right at least to advise you. I lay it down as a maxim, that the business of an actor is to divest himself, as much as possible, of his private sentiments, and to enter, with all the spirit he is master of, into the character he represents; and this is an indisputable claim which the public in general have upon him. But if an actor, in order to please part of that public, should, by any unusual emphasis, gesture, or significant look, mark out a passage in his part (which at another juncture he would have passed by lightly) as a party stroke, he, in that instance, steps out of his feigned character into his natural one, than which nothing can be more disgusting or insolent to any auditor who came with no other intent but that of seeing the play; such a performer ought to be looked upon by the public as an incendiary, as one who throws the brand of discord amongst them; for, supposing persons of a different way of thinking should take into their heads to resent and oppose this behaviour, the theatre, in that case, instead of being a place of pleasure and entertainment, would become a scene of riot and disorder. I was in hopes that the example I had set upon this occasion would have had so much influence as to make admonitions unnecessary; for whatever my private sentiments may have been, I defy any person to charge me justly, that the least glimpse of them appeared in my conduct, either as a manager or an actor. I understand my duty to the public

too well; it is my business to take all the precautions and care in my power, that the audience shall enjoy their entertainment in peace, and not by any act of mine, to encourage and foment party feuds. Indeed I laid it down as a fixed resolution to observe in my public conduct a strict neutrality; I determined to exhibit plays in the same order which I should have done had the town been entirely free from party; and as on the one hand I would lay no old play aside, lest it might appear an application to the times, so on the other I would revive none purely to serve that end; for though I knew many plays that, in the present disposition of the people, would have filled my house many nights, and consequently my purse, yet I should have looked upon myself in so doing as a time server, a prostitute of the stage, and a betrayer of the public.

"Though it must be allowed that the rule I had laid down for my conduct was the fittest to be observed by the manager of a free stage, yet I was far from escaping censure. Persons of both parties have often taken offence at passages which they themselves applied, and conclusions were drawn, that the play was played on purpose, &c., and indeed this was unavoidable, for plays in general, being pictures of life, and tragedies mostly of high life, and of persons concerned in state affairs, it was not possible but that many incidents, characters, and sentiments might bear application from minds biassed by party. This is more particularly the case with our English plays, whose authors have chosen more subjects, and written more freely upon government, than any other nation under the sun. You all know that the parts of the play of 'Mahomet' were delivered out, and the representation of it intended last year; but before it could be got ready the season was so far advanced that it was thought not prudent to hazard the performance of a new play to thin audiences.

"The necessary amputations practised on every play, were performed at different times on this at rehearsals, according as the scenes were found tedious in repeating, and many of them were done at the request of the actors concerned in the scenes. I do not remember that any performer during the several readings and rehearsals took notice of any passage that might be applicable, or any sentiment that might be termed a party one; and yet they are generally as sagacious in finding out such things as most people; indeed in point of story, characters, incidents, and moral, I consider it as one of the most unexceptionable plays that could be performed. And after having several times looked it over again with the utmost attention, I own myself stupid enough to be still of the same way of thinking; nor can I see how the tragedy itself, or any part of it, can be applied to the present times, without great straining of the sense and words. However, as some persons judged otherwise, I thought proper to lay it by awhile, that people might have time to read and examine it coolly; if that be done, I make no doubt but all prejudices will be effaced. I have therefore ventured to give it once more to the public, directly as it was performed before, without diminution, alteration, or addition of a syllable.

"As it was at the representation of this play that an innovation was attempted and given way to, never known before in the theatre, I think it my duty to lay before you my sentiments upon the dangerous consequences which may attend it, to the stage in general, and to all actors in particular—I mean a right claimed by the audience to encore speeches in plays.

"If it be once established as a rule, that one part of an audience have a right to encore a speech, upon the same principle any other part of that audience may claim the same right. If they have a right to have it once repeated, why not several times as well as once? Why not any other speech as well as that one? And why not as many speeches as they shall think proper? If one party should encore a speech, because they think it makes for their purpose, may not another party encore as many as they think will make for them? Nay, may not from a mere spirit of opposition encore every speech as often as they shall think proper? In this case, I do not see how we shall be able to get through one act of a play.

"If one part of an audience should cry out Encore, have not the rest an undoubted right to cry out, No more, as the first claim is neither founded on reason or custom; in such a case, is not an actor certain of disobliging one party or other; and is he not liable to the resentment and ill-treatment of one or the other? In such a situation, the actors would be in a much worse condition than the musicians formerly were. We all know the dreadful usage they met with, in consequence of a claim of that nature from the galleries. They assumed a right of calling for what tunes they pleased, but not always agreeing upon the tune, one party roared out

for one, and the other was as clamorous for another; as the musicians could not possibly play both together, they thought that playing them one after another would satisfy all parties, but that would not do. If they played the one, the advocates for the other thought they had a right to precedence, and saluted them with a volley of apples and oranges. At last the outrage rose to such a height, that they threw glass bottles and stones, cut several of the performers, and broke their instruments. Then, there was no resource found, but that of ordering the band never to go into the box, but to play behind the scenes, at least till the pit was so full that they might be protected. This expedient being often put in practice, put an end to the claim, and the band afterwards performed such pieces as were allotted to them without interruption. But the actors could not possibly have such an asylum; they cannot play their parts behind the scenes, their duty obliges them to a post open to the battery of an incensed multitude, some of whom would shower their resentment on them through malevolence or personal pique, others through mere wantonness. Nor is this an imaginary or unlikely thing; everyone who remembers the state of the stage before it was rescued from slavery, must know that the thing often happened, merely through private resentment.

"In short, if this new claim is to be forced down our throats, I do not see where the matter will end, I know not why new claims may not be made every night; I know not why they may not insist upon performers doing whatever they please; in that case, I know no human being in so deplorable a state of slavery as an actor would be.

"In short, this a blow struck at the very vitals of the stage, calculated to destroy all taste in the audience, and spirit in the performers; to breed perpetual feuds and divisions amongst the spectators, and entail perpetual slavery upon the actors. I hope you have all too great a sense of liberty, and have the good of the society too much at heart, to encourage so fatal an encroachment upon your rights; and in that hope, I shall leave you entirely free to act as you think proper, wishing that your conduct may rather be the result of a manly sense of freedom, than obedience to an order. In all new cases indeed, I would rather persuade than direct, convince than command. To you Mr. Digges, I must particularly apply, as you were the first tragedian I ever heard of who repeated a speech upon the encore of an audience. I am in hopes it was the suddenness of the thing and want of time to reflect upon the ill consequences which might attend it. You have now heard my arguments upon that head; if you think they are of weight, I suppose you will act accordingly; if not, remember I do not give you any orders upon this occasion, you are left entirely free to act as you please."

When Sheridan had ceased reading the above excellent lecture or discourse on the duties of an actor to his company, Digges not unnaturally felt himself called upon to speak, as from the concluding sentences it might be supposed that Sheridan particularly alluded to him. As the play of "Mahomet" was to be performed on the following evening, Digges wished to know, if a demand was made by the audience upon him to repeat the passage in the play, how was he to act. If he complied with the voice of the audience, he was anxious to know would his so acting meet the censure of the manager, Sheridan replied: "Not at all; I leave you to act in that matter as you think proper." It must be confessed that Digges was placed in a critical position, for despite what Sheridan said, he was left in doubt how to act.

On the next evening, the doors of the theatre were scarcely opened when the crowd came pouring in, the pit was soon filled by disturbers bent upon having the encore responded to, or a riot in case of refusal. No sooner did Digges appear in his character of Alcanor, than he was greeted with tokens of applause, and hardly was the memorable speech delivered, when there was a general demand made from the pit, and the other parts of the house for *Encore, encore*. Digges was dumb for a few minutes and perplexed as to how he should act, but the violence for encore increased, and seeing that the disturbers were determined to have what they wanted, he stepped forward to the front of the stage, and when he obtained a few minutes' silence, said: "It would give him the highest pleasure imaginable to comply with the request of the audience, but he had his private reasons for begging they would

\* See ante.



be so good as to excuse him, as his compliance would be greatly injurious to him." This apology was soon interpreted by the audience to mean that Digges was prevented from complying to their demand by Sheridan's order. The disturbers certainly wanted but a pretence to wreak their vengeance on the manager, and soon rose a cry over the theatre of Manager! Manager!—Sheridan! Sheridan! Had the manager come forward, by a few words he might have explained all, and the evil that followed would have been averted; but he chooso to act otherwise, as he thought with dignity, risking the result. The clamour continued in the theatre, and no sign of its cessation being evident, Sheridan ordered the curtain down, sending the prompter out to inform the audience that they were ready to perform the play, if it was suffered to go on in quiet; otherwise, that those present were at liberty to retire and receive their money again. This message, on account of the noise, was not heard by the audience, and the prompter was forced to retire. The audience still persisting in calling out for the manager, Sheridan is reported to have said, "They have no right to call upon me; I'll not obey their call; I'll go into my room and undress myself." He proceeded to carry his resolve into practice, notwithstanding the advice of several of his friends, who had left their boxes and followed him to his dressing room. Among those friends was a Mr. Adderley, who offered to undertake that the gentlemen in the pit should not offer any insult to Sheridan if he would come down and pacify the audience by a few words of explanation. Sheridan, it is said, on the occasion replied, that he had not the least apprehension from the gentlemen of the pit, but his fears were of the behaviour of those in the galleries. He was sorry to say that the hour had arrived when he could no longer support the stage upon a footing which the world had approved for many years, and, therefore, he was determined to withdraw. He added also, that he should take another opportunity of convincing him that he was driven to the fatal necessity before mentioned, but he was under too much perturbation of mind at present to be able to do it as clearly as he could wish.

Finding his mediation failed, Mr. Adderley left the theatre directly for home, and Sheridan having undressed himself, got into a sedan chair, and was carried to his own house in Dorset-street. The charming Mrs. Woffington in vain tried the effect of her persuasive eloquence in allaying the fury of the audience, but on account of her known connection with the Beefsteak Club and her intimacy with the Court party, she was received coldly, and her influence on this occasion was nil. In a theatre where her beauty and capital acting had previously conquered admiration, she was powerless. As a last resource, the company prevailed upon Digges to go forward, and he was attentively listened to while telling the audience that Mr. Sheridan had laid him under no injunction not to repeat the speech they called for, and therefore, should not on that account have incurred their displeasure. This declaration, if made in the beginning, might have smoothed over matters; but it came too late. The storm was not to be abated except with the production of the manager. When told that he had gone home, the disturbers insisted that he should be sent for, saying, that they would wait patiently for an hour. Messengers were dispatched to Dorset-street, to acquaint Sheridan of the critical state of affairs at the theatre, while in the meantime those bent upon a riot amused themselves in the theatre as best they could. Arguments failed to shake Sheridan's resolve, and though he knew his property in the theatre was at stake, he would not consent to go back. The hour expired, and the call being again made for the manager, and no appearance being put in, the rioters proceeded methodically to carry out the business of destruction. Two of the principal leaders, persons apparently of some position, rose in the middle of the pit, and proceeding to the boxes, with the greatest gallantry and polite-

ness handed out the ladies. Next a young gentleman stood up in the centre of the pit, and called out "God bless His Majesty King George, with three huzzas." When the last huzza was given, the rioters fell to work with vigour and vengeance, and in less than ten minutes the audience part of the theatre was in ruin. Their violence did not end here, for the young "bucks" and "bloods," and their aiders not satisfied with the wreck they had caused, jumped on the stage, and drawing their swords, cut and hacked all before them. Scene after scene was destroyed, and next the wardrobe was attacked, but this being well defended, to glut their rage the grate was dragged out of the box-room into the middle of the floor. Being full of burning coals it was thought it would have set the house on fire, but after the departure of the rioters, it was quickly removed back to its position, and their wish was not realised.

It may be asked where were the peace-officers, or what were the magistrates of that day doing, when such scenes could be perpetrated in the centre of the city? The riot was allowed to continue for hours undisturbed. The Lord Mayor was ill with the gout, and the Sheriffs, like some of our modern police constables, were nowhere to be found. Between one and two in the morning, no person superior to a deputy constable could be procured, and of course long before that time the mischief was done—Sheridan's property destroyed, and the theatre barely escaping being burned to the ground. Writing of this event, Hitchcock mournfully but truthfully remarks: "Here let us pause, and with an eye of pity look back upon the dreadful scene of havoc and destruction which, in an unlucky hour, blasted the fair hopes of so many years. Ill-fated manager; hard was your lot to direct the dramatic state in such perilous times. Party rage and malice have long since, thank heaven, exhausted their envenomed shafts. But who shall repair your wrongs? The great scheme of your life is defeated at one blow, and the fruits of eighty years' indefatigable pains blasted in one night. You awake from your dream, and find that the best and most vigorous of your years have been employed to no purpose."

After suffering the cruel treatment we have described, Sheridan gave up his idea of management, and advertised the theatre to be let or sold, and took leave of the public in an affecting address. In the midst of his misfortune his benevolent character shone out. The ruin of his theatre meant the ruin, or otherwise great distress of those who obtained their living by him. He felt for the performers who had been under his care, and to his honour be it recorded, he generously gave them up the use of Smock Alley Theatre, or all that remained of it, with wardrobe, scenery, for their benefits during the remainder of the season. This he did, not only without any emolument, but at a certain loss each night to himself. After undergoing a few temporary repairs, the theatre was re-opened on March 18th, 1754, which was about a fortnight after the riot, by command of the Duke and Duchess of Dorset, for Mrs. Woffington's benefit. The tragedy of "All for Love," on the occasion, was played to a very crowded audience. Next followed the other benefits, which continued till the middle of May, when the theatre closed, and Mrs. Woffington left for London. Events are now crowding upon each other, Smock Alley is about passing under a new but brief management, to be again succeeded by the recall of Sheridan.

#### PERILS OF BUILDING SOCIETIES.

THE original objects of building societies were good, and, notwithstanding several changes that of late years have taken place in their constitution and management, these societies, when their affairs are honestly administered, prove a great benefit to the working and industrial classes who are

members of them. Several of these societies, however, during late years have partly ignored the objects of their formation, and are worked and utilised by classes of individuals for whom they were not primarily intended. Some have become mere loan, financial, and stock-broking agencies, and have added or allied themselves to other businesses of a suspicious and injurious character. Not a few of them have become milch cows for their directors and their agents, and a select few who manage to work them to their own advantage. We could unfold a tale as to the working of some of them in this country as well as in the sister kingdom, but another opportunity will occur for speaking of the doings of one or more of them in detail.

It may not be amiss now to point to the affairs of the Patriotic Building Society at Sheffield, whose deficiencies have assumed a much more serious character than they did some days ago. It has already been publicly stated that the eight directors of the Twelfth Patriotic Society had lent to themselves, on mortgage of the Cardigan Works and their own personal security, £65,000 of the money of the society. £50,000 was money lent, and £15,000 was interest that accrued on the loans. From the estates of four of the directors nothing was to be expected; from the estates of Messrs. Cave and Parkin, who have gone into liquidation within the last few days, probably less than £5,000 will be forthcoming. The hopes of the members of the society have, therefore, rested upon the other two directors, one of whom is reputed to be moderately well off, and the other has property estimated to be worth from £15,000 to £20,000. The assumption has been that these gentlemen would acknowledge their responsibility, and give up all they possessed to the club. A writ has been served upon them jointly with the other directors for £2,555, and the time allowed for payment expired on Saturday, the 7th inst. It is at present an open question with the more wealthy director whether he will not pay out the writ and leave the club to take its own course. The society is not legally constituted, the loans have been advanced contrary to rule; and if the directors repudiate their responsibility the society is represented to have no legal claim upon them. All the investors have to show in proof of their loans is a two-penny pass-book, and that is practically valueless. When the officials or the various clubs met the other evening they all reported that with the exception of the Twelfth Club all were perfectly satisfactory, and were in no sense compromised by the loans to the Cardigan. It has now transpired that when the funds of the Twelfth were on one occasion run out, the directors applied to the Thirteenth Club for a loan of £2,000 on promissory notes. The notes were prepared, but were never signed, and the eight gentlemen had obtained from the Thirteenth £7,000 on the same unsatisfactory security as that tendered for the loans from the Twelfth. That club will, no doubt, recover its loss, but the position of the Twelfth is regarded as hopeless, and the investors will undoubtedly sustain very heavy loss. This is not the first occasion on which there has been a serious upset with these patriotic clubs. More than a dozen years ago some of the shareholders became aware that large advances had been made by the Eighth Patriotic on insufficient security; a meeting was held, and a committee of investigation appointed. Their report fully confirmed the statements that had been made and further, that £3,000 had been lent by three of the directors altogether contrary to rule. The three directors were called upon to refund the £3,000, but they refused to do so. That club sustained a loss of over £12,000. Public confidence in the stability of these societies appeared unshaken, and had remained so up to the last few days.

We hope that what has been stated above will lead to a little more caution.



## INSTITUTION OF CIVIL ENGINEERS OF IRELAND.

A GENERAL meeting of this institution was held on Wednesday evening last, in the Museum Buildings, Trinity College: Robert Manning, Esq., C.E., President, in the chair.

Messrs. William H. Mills and Arthur E. Joyce were balloted for and duly elected as members of the institution.

Mr. John P. Griffith, member of council, read a paper on "Wrought-iron Dock Gates, Dublin Graving Docks." The paper, of which we give a summary in another column, was illustrated by numerous diagrams which were referred to by the author.

A discussion ensued, in which Messrs. B. B. Stoney, Smith, Browne, the chairman, and others took part.

## THE ROYAL IRISH ACADEMY.

A MEETING of the Academy was held on Monday evening. Sir Robert Kane, president, in the chair.

The Astronomer Royal read a letter from Professor Tait, on the subject of "Lagrange's Equations of motion in generalized co-ordinates," and also "Observations on the Comet of 1877, made at Dunsink."

Mr. Denis Crofton read a paper "On the Brick with Archaic Babylonian Characters in the Museum of Trinity College." The brick, which he exhibited, measured  $12\frac{1}{2}$  in. in length, 12 in. in breadth, and 3 in. in height, and was supposed to be about 2,500 years old. The inscription it bore, stamped when the clay was soft, was in six lines, and was interpreted as follows:—"I (am) Nebuchadnezzar, King of Babylon, restorer of the pyramid and tower, eldest son of Nabopolassar, King of Babylon." He (Mr. Crofton) had never been able to find out anything about the history of the brick, or as to how it came into the museum.

Professor O'Reilly, Royal College of Science, exhibited a drawing of the meteor seen on Friday night, the 6th inst., taken at Irishtown-road, within three minutes after its appearance. The direction was apparently W. 15 degs., 20 degs. S. (to the east of the Pleiads, then just visible). The colour of the globe was the green of a copper flame. It was reported that it fell near Cork, and was apparently near the size of a setting sun.

The Rev. T. O'Mahony, D.D., said he was at Stranorlar, Co. Donegal, on Friday night, when he observed a dark cloud on the southern side of the sky, between which and the tree-tops there was a clear space. Suddenly his attention was attracted by this globular meteor coming from behind the clouds, extremely brilliant in colour, and in a few seconds a flame sprang up and all was over. It appeared of a red colour.

Mr. Crofton said the colour described by Professor O'Reilly might be produced by the existence of burning barium.

The Rev. G. H. Roade, Mr. F. A. Tarleton, LL.D., F.T.C.D., and Mr. B. Williamson, M.A., were elected as members.

## INQUIRY AS TO UNHEALTHY AREAS IN THE CITY.

ON Friday, Mr. W. P. O'Brien, L.G.B. Inspector, held an inquiry in the City Hall in compliance with a petition presented by the Corporation and the sanitary authorities, in the matter of putting in force the Artisans' Dwellings Act, 1875.

Mr. O'Brien stated the object of the inquiry. He had received only three objections. The first was from Mr. Bradshaw, as agent of Mr. Hughes, the owner, in respect of area No. 3. The owner objected to part with his interest in his premises, which he recently purchased in the Landed Estates Court, with the view of making valuable and necessary improvements in them. He also stated that he would apply for compensation for loss sustained by the notices which had been published under the Act of 1875, and which had had the effect of preventing the tenants paying their rents since the serving of said notices. The second objection he (Mr.

O'Brien) had received was from the owners of houses and premises comprised within area No. 1 (Coombe district), who objected to being compelled to surrender their holdings to any corporate body or company under any pretence whatsoever. They stated that their tenants were well cared for, all sanitary arrangements being attended to, and moderate rents being charged. To this objection there were ten signatures of owners. Mr. O'Brien also read an objection signed by tenants of the same district, who objected to being disturbed in their holdings. There was another objection from Mr. George Price.

Mr. E. D. Gray, T.C., said the Corporation had been put in motion by Dr. Mapother, who reported twelve areas as being unhealthy, the Corporation selected two out of them.

Dr. Mapother, medical officer of health, deposed that most of the houses within the districts mentioned were unhealthy; zymotic diseases were frequent, the death-rate unusually high, and the sanitary arrangements were exceedingly bad. He had examined the five houses in Fottrell-square, and he found them most defective in sanitary arrangements. Admission from the street to them could only be gained through a narrow hall, in which there was a trapdoor covering a cesspool. The condition of these districts could not be remedied by partial alterations and patchings, and it could only be done by some such scheme as the Artisans' Dwellings scheme.

Mr. Boyle, secretary to the Public Health Committee, deposed that the Coombe and Boyne-street areas were most unhealthy.

Evidence in support of the scheme was also given by Mr. Furlong, B.L., Sanitary Inspector Harrington, and Mr. Parke Neville.

Mr. Thomas Drew, F.R.I.A.I., stated that the Artisans' Dwellings Company had come to the conclusion that the Coombe and Boyne-street areas were the best suited to begin with. The company purposed building cottages on the ground when cleared. On the Coombe area it was intended to build 143 houses, each accommodating a family of five, and 14 three-storeyed houses. It was proposed to build cottages of different kinds, some three rooms and some of two. It was considered that cottages would be much better suited for Dublin than the barrack system which was in vogue in England. The three-roomed cottages were expected to cost £100 to build, and those, it was calculated, would be let at 6s. a week. The plan of the company provided for the accommodation of 975 persons in the Coombe.

Mr. Spencer, Assistant Secretary to the Dublin Artisans' Dwellings Company, was examined as to the proposed working of the company. The minimum rent of a one-roomed house was 2s.

Mr. Gray deposed that he obtained from a sworn valuator an estimate of the cost of the purchase of the sites of the two areas. For the first area the estimate was £8,513 15s., and for the second £2,515, to which were to be added the expenses of the committee of carrying out the scheme, law costs, &c. The committee had estimated a rental of £130 for the Coombe area, or £30 an acre, and £40 for the Boyne-street site, or at the rate of £50 per acre. This gave £170 as against the gross outlay of £727, leaving a balance of £557 per annum to the debit of the Dublin improvement account, which would represent less than a farthing in the pound on the present valuation of the city. It was calculated for the new property that there would be a gross rateable value of £1,342, all of which would pay rates, as against £269 10s., leaving an increased annual rateable value of £1,072 10s., on which all the rates would be paid. They took the average rates at present levied for local purposes, including police tax, at 7s. 5d. in the pound. Next year it would be 7s. 8d., which, on £1,072 10s., would represent an additional revenue to the citizens of £411 12s. 6d. This annual sum, deducted from the annual cost of £557, would reduce the net cost to the citizens to £145 17s. 6d. per annum. Possibly these estimates were a little sanguine, for, of course they could not know what amount

of litigation and swearing they might have to contend against. The cost estimated by the committee was as follows:—Purchase of areas 1 and 2, as per estimate, £11,028 15s. One year's loss of collectable rates, £103 6s. 2d. Preliminary expenses, £1,000. Cost of roads, sewers, &c., £1,800, less value of materials (£300), £1,500. Contingencies, £3,367 18s. 10d. Total £17,000.

After some further evidence in support of the case for the Corporation, owners of property in the areas in question were examined in opposition to the scheme. Their evidence was to the effect that their premises were not in the unhealthy state alleged, and that a great injustice would be done them if their property were interfered with, and that the tenants who had low rents of a few shillings would be thrown out, and put to very great inconvenience in trying to get other homes.

Mr. Curtis, B.L., addressed the Inspector on behalf of Mr. Frederick Hughes, after which the inquiry terminated.

## DISPUTES IN THE BUILDING TRADES—ENGLAND AND SCOTLAND.

DISPUTES as to wages and hours of labour between employers and workmen are increasing throughout England and Scotland. In one or other of the building branches there are demands for a rise of wages, a strike, or an impending strike, in the following cities and towns:—London, Glasgow, Edinburgh, Aberdeen, Liverpool, Perth, Portland, Wigan, Dumfries, Stratford-on-Avon, Arbroath, Kirkwall, Ludlow, Leeds, South Staffordshire, Dundee, and other places in the sister Kingdom. In London, at a meeting of the master builders, the proceedings of which were private, several resolutions it is understood were passed for the purpose of organising a committee, and seeking support. Notwithstanding the depressed condition of the labour market in many parts of England, business in the building trades as a whole appears to be pretty brisk.

## FORTHCOMING TIMBER SALES.

OUR advertising columns contain notices of sales to be held during the present month in this city. The first will be on the 24th inst., at Seville-place; the second on the 26th, at Sir John Rogerson's-quay.

## THE BUSINESS OF A MUNICIPAL COUNCIL—WHAT IS IT?

THE sixty gentlemen chosen by the citizens of this, the second city in her Majesty's dominions, to represent them in the Corporation, forget perhaps that they have been elected to look after the health and improvement of the city, and not for the purpose of discussing foreign and home politics. We beg to draw attention to the notice convening a meeting on Monday next:—

"To consider and do, or cause or direct all necessary acts to be done, upon or in relation to the business mentioned in the following requisition presented to the Right Honourable the Lord Mayor, viz:—To represent to her Majesty's Government the effect which the Clerical Abuses Bill recently introduced into the Italian Parliament would have if passed into law, to protest against such a breach of international faith, such a violation of the principles of religious liberty, and such an outrage upon the spiritual freedom of His Holiness the Pope; and to take such steps thereon as the Council may approve."

The requisition is signed by 24 members, one of whom is Alderman Peter Paul M'Swiney, "Chevalier of the Order of St. Gregory the Great."

"It is time," writes a morning contemporary, "that such a farce should be ended, and that Dublin should have a corporation which will limit itself to its proper work, and strive to accomplish it."

## CONVENT OF CHARITY, UPPER GARDINER-STREET.

MESSRS. Browne and Son, of Camden-street, have just erected in the above convent a fine-toned organ.



## ADVERSARIA HIBERNICA.

## LITERARY AND TECHNICAL.

WHEN Vallancey, the antiquary, visited the baronies of Forth and Bargio (or Bargo), in Wexford, towards the close of the last century, the descendants of the original Anglo-Saxon colonists in that quarter had preserved much of their ancient manners, customs, and language. Within the last half century, however, the characteristics that marked the inhabitants of this district have been rapidly vanishing. Formerly they kept within their own district, and intermarried with their own race, but the increase of population, and the exigencies of modern life and living have broken down olden barriers and the spirit of exclusiveness. Vallancey states, that when he was first acquainted with the colony, a few of both sexes wore the ancient dress; that of the man was a short coat, waistcoat, and trunk breeches, with a round hat and narrow brim; that of the woman was a short jacket, a petticoat bordered at bottom with one, two, or three rows of ribband or tape of a different colour. Some were to be seen whose jackets were of superfine woollen cloth, of a dark brown colour, edged with a narrow silver lace. The dress of the head was a kercher. The principal names of the old colonists were Hore, Stafford, Whitty, Rossiter, Sinnott, Cod(d), Quiney, Murphy, Stephen, &c. The gentlemen inhabiting the country were chiefly descendants from the officers and soldiers of Cromwell's and King William's army, and among the names were Hervey, Nun(n), Edwards, Hughes, Palliser, &c. At the close of the eighteenth century, and for several years afterwards, the people of the baronies of Forth and Bargio lived well, and were then as they are still, industrious, cleanly, and of good morals. The poorest farmer eat meat twice a week, and the table of the wealthy farmer was daily covered with beef, mutton, or fowl. The beverage was home-brewed ale and beer of excellent flavour and colour. The houses of the poorest were well built considering the times, and well thatched, with out-offices for cattle, fowls, carts, &c. The people were well clothed, strong, and laborious; the women doing all manner of rustic work, ploughing excepted, and receiving equal wages with the men. "In this delightful spot," writes Vallancey, "the greatest harmony subsists between the landlord and the farmer, and it is common to meet the tenant at the landlord's table. Such is their aversion to idleness, that if a beggar is met in these baronies he is immediately handed from house to house until he is out of the barony." The marriage customs in Forth and Bargio were much the same as the native Irish—the relations and friends bringing a profusion of viands of all kinds, and feasting and dancing continuing all night, the bride sitting veiled at the head of the table unless called out to dance, and in that case the chair was filled by one of the bridesmaids. One of the customs at every marriage (said to be brought from England originally) was the cutting of an apple into small pieces, and throwing it among the crowd. Vallancey gives in his description a vocabulary of the language of these baronies, and it is a curious compound in sooth; and the antiquary also subjoins an old song in the dialect which was common to the district, the subject of which is a game at ball, known as hurley, or hurling. Here is a specimen with Vallancey's translation:—

Fade tell thee zo lournagh, co Jone, zo knagge.  
Th' westest all curcagh, wafur, an cornee  
Lidge w'ous ana milagh, 'tis gay and loonee.  
Huck nigher y'art scudden fartoo zo lachee.

What ails you so melancholly, quoth John, so cross  
You seem all snappish, uneasy, and fretful  
Lie with us on the clover, 'tis fair and sheltered,  
Come nearer, you're rubbing your back. Why so ill  
tempered?

This curious dialect is stated to be radically the same with the English; but if it is, it must be with some provincial English far back. The inhabitants in Forth or Bargio, even in Vallancey's time, bought and sold at market in the modern English, although they used their own dialect—or rather a corrupt

or mixed specimen of it—in their ordinary intercourse at home. No Irish seems to have been spoken in this district at any period by these colonists. We would like to know the exact state of the manners and customs of the present inhabitants of the above baronies, and if the olden dialect still exists to any extent among the people.

Oysters were once and not many years since plentiful, good, and cheap in Dublin, and of the best description, raised from natural and artificial beds. Of late years, however, oysters of the best description have become a luxury, and are, consequently, not procurable or within the means of the working poor.

In London, within the last quarter of a century, oysters of the coveted kinds have rapidly advanced in price, and what could have been purchased at sixpence or a shilling now amounts to several shillings. The oyster trade of England ranks in importance with the herring, pilchard, and other fisheries. The London market is principally supplied by the artificial beds at Whitstable, Rochester, Milton, Colchester, Barnham, Faversham, and Queensborough. These natives, grown on artificial beds, are supposed to be full-grown when between five or seven years old; but sea oysters attain their perfection at four years. On both sides of the coast of Ireland oysters abound. The Burren oysters of Galway (known as Burton Bindon's oysters) are from an artificial bed. The oyster beds in Belfast Bay are of a very large size, the shells being in length from 5½ in. to 6 in., and in breadth from 5 to 5½ inches, the depth with the valves closed being 2½ inches. Modern epicures profess not to care for these large kinds, preferring the smaller variety, which they deem the best; but they are too often mistaken in thinking they have purchased a flavour at a high price. In Dublin, for upwards of a century and a-half the Poolbeg and Howth oysters were celebrated, and, later again, the artificial beds at Clontarf and Sutton. The beds at Clontarf and Sutton were transplanted from Arklow. As far back as 1755 these oysters were described as not being so good as they were in former years, in consequence of not being allowed to stay long enough in their beds, being taken up by reason of the great demand for them. The old Poolbeg oysters were dredged from natural beds, and our old citizens remember them well, as they were large, with a brown shell, in which pearls were often found. There was a rock oyster formerly procurable at Howth, which was much esteemed, but they were difficult to obtain, being taken only at the ebb of high spring tides. The oysters procured formerly at Dalkey Sound were as large as those of Poolbeg; it was thin shelled and good. There was a natural bed which was dredged much in the last century lying east by north-east from Ireland's Eye. This oyster was described as large as a horse-shoe, lying eighteen or twenty fathoms deep. The deeper the water the firmer the oyster, and the nearer to shore the less firm. The Malahide oyster as first known, was from a natural bed, and it was formerly esteemed excellent, having a delicious flavour. This oyster was partly green finned. The Rush and Skerries oyster of our young days, was a large rock oyster full of salt, and mostly used in sauces. Those which were taken formerly near the mouths of rivers, were preferred as being more sweet, fat, and better tasted, but we doubt they would be so considered of late years, knowing that our tidal and other tributary streams are foul carriers of poisonous town sewage. The opening of the oyster season in autumn in Dublin was formerly commemorated by the proprietors of the beds sending their carts on the first day of the season into the city, gaily decked with green boughs, the horses' heads being decked with ribbons, rosettes, and other ornaments. A band of music, or one or two performers at least, accompanied the carts from Malahide, Sutton, Clontarf, and other places round the coast to the city. The oyster and shellfish taverns through the city, on the opening night did

a roaring trade, and poor and rich had their half dozen or dozen, the latter with their penny loaf, pint of XX, and the usual condiments. The real Poolbeg oyster, we believe, is long extinct, and the pearls are *non est inventus*. "Poor dear dirty Dublin," yet with all thy faults we love thee still.

Many persons suppose that "strikes and lock outs" are the growth of modern life, but they have existed for long centuries in one form or another. The records of the old guilds of trade in different towns and cities of the three Kingdoms, are full of matters bearing upon trade regulations, hours of work, wages to be paid, fines and penalties for bad materials and defective workmanship, and sundry other things besides, affecting both masters and workmen. The masters of old, as well as the workmen, were held amenable in various ways, and an examination of the work they turned out for the public use was made at the instance of the mayor and aldermen in their respective towns and cities. Craftsmen combined in the middle ages to better their condition as well as they did in the eighteenth and present century, and left one employer to go to another before finishing their contract or engagement, although the offence was visited with punishment when brought to the book. The "strikes" of old of course differed much from those of the present day, and were partial and of short duration. The workmen lacked organization and education, though possessing handicraft skill, and they were greatly dependent upon a few masters. The facilities of travel might be said to have been *nil*, for, two or three centuries back the skilled workman who needed to change from one town to another had to become a traveller on foot, and hence he was a real journeyman mechanic. Coaches and sailing vessels only existed for the wealthy and well-to-do. It was not until the railway era came in that workmen in any great numbers moved about from one part of the kingdom to another. Next came a cheap Press, spreading knowledge far and wide, and telling men in the most distant parts what other men were doing in an opposite direction. Modern trade unions are the growth of the nineteenth century. Trade societies, apart from the old municipal guilds of trade, of course existed on a small scale in the last century; but it has been only within the last fifty years that trade unions have assumed large proportions. Say what we will, it must be acknowledged that our modern trade organizations are a power in the land, and are increasing in power and influence as time advances. It is to be hoped that they will use their power wisely, and for the good of the society on which they must be always dependent. Whether workmen become organised bodies of co-operators in the future, or still continue to preserve the present relations between employers and themselves, they must be dependent upon the public. No interest can stand alone in modern times, and no class can cut itself off from other classes, unless they wish to pack off bag and baggage, and settle down afar in the desert. We would like to see all future disputes between employers and workmen amicably settled by arbitration, and an end put to disastrous "strikes," and equally injurious "lock outs." Either sides of course may sometimes achieve a success, and the successful may occasionally, if not often, be the wronger and not the wronged. We do not dispute the right of workmen to sell their labour in the highest market, or to resist a deduction of wages if they think it is unwarranted. We accord the employer the same privileges of buying in the cheapest market, if what he can buy is equally good with that which he parted, or is about to part. A standard rate of wages is seldom long retainable. There must be a tendency upwards or downwards for the benefit of workmen or employers, or for their loss. A "strike" or a "lock out" is not the way to meet the difficulty, and at best of times it is only a clumsy expedient. A friendly conference or arbitration is the only safe and



sensible plan for employers and workmen to arrive at a settlement of their differences.

H.

### MUNICIPAL TOWNSHIPS DOINGS.

THERE are several matters connected with the management of our municipal body and the Dublin townships which call for detailed and sharp criticism, had we time and space to devote to the subject. The inquiry carried on by the Local Government Commission brought to light acts of most reprehensible conduct and mismanagement, acts of jobbery and diversion of public money for the benefit of individuals. The Government audit of the Corporation accounts also revealed several illegal and indefensible acts. There are other grave and serious matters, too, which we will refrain from particularly alluding to, which have placed the Corporation itself as well as individuals in a most painful and humiliating position. We have honestly and in an outspoken manner endeavoured for years past to lead to a reform of municipal rule in this city; and abuses which we have long specified, and which still continue, have become so patent now, that the greatest friends of the Corporation can deny them no longer. Surely the time has come at last for purging the municipal body of its rottenness, and electing honest, respectable, and efficient members who will truly represent the citizens and ratepayers. Taxation is excessive in Dublin, and it has gone on increasing for years. Rates have been struck and increased in this unfortunate city, not for the purpose of carrying out desirable and long-called-for improvements, but for the set purposes of indulging in litigation, increasing salaries, and making new appointments. We have ever been opposed to what tends to jobbery, but always willing advocates for every public improvement required, and honestly intended to be carried out for the common good. Independent criticism is unpalatable, we know, to the majority of the municipal body, and hence—but the rest is known.

### THE DUBLIN GRAVING DOCK GATES.\*

THE subject of this paper will, perhaps, be of small interest to most of our members, few of whom have specially devoted themselves to marine engineering; but from a sense of the importance of small matters of detail in this special branch, and also because little has been published on this particular subject, the author is induced to give a brief description of the wrought-iron cellular gates which close the entrance to the large Graving Dock belonging to the Dublin Port and Docks Board, together with an account of some recent repairs done to them. These gates have now been erected nearly twenty years, but though the description of work so old is unusual in our papers, probably the experience gained in that period will only add to any value which these remarks may have, inasmuch as time has brought out many of the good points of the design, and also shown the direction in which improvements might possibly be made in future structures of a similar kind. The author regrets that he cannot speak from personal knowledge of the actual erection of the gates, but only of the more recent repairs. The gates were constructed upon Mr. C. H. Wild's patent, dated Feb. 17, 1851, and from the designs of Mr. Robert Mallet, the acting patentee, the past President of this Institution. Among the "improvements in certain structures for retaining water" included in the patent, the patentee lays claim to the following, which apply specially to these gates:—1. "Constructing the folding gates of locks and other structures for retaining water of wrought-iron plates arranged in a cellular form." 2. "Constructing the folding gates of locks and other structures for

retaining water with an air-tight compartment at the bottom and admitting the water to flow in and out above this compartment, so that the weight of the gate may be equally or nearly equally balanced at different heights of the water." 3. "Making the joint at the heel-post of the gates for retaining water" in the peculiar manner hereafter described.

The entrance to the Graving Dock is 70 ft. wide, with a depth over the sill of 4 ft. at low water and 17 ft. at high water of equinoctial spring tide. The versed sine of the gates is 17 ft. 6 in., or one-fourth of the span, and the length of each gate, measured from the centre of the pintle to the intersection of the axes of the gates at the meeting-posts, is 40 ft. 6 in., and the width 3 ft. The inside and outside plating of the gates are parallel, with the exception of the ends near the heel and meeting-posts, which are curved. Each gate is divided into ten horizontal compartments, the two upper being 3 ft. high, while those below are 2 ft. each. On the outer or river face the plates are arranged with their lengths vertical, while those on the inner dock face have them horizontal. The plates vary in thickness from  $\frac{3}{4}$  in. to  $\frac{7}{16}$  in., with a few of the exceptional thickness of  $\frac{1}{2}$  and  $\frac{3}{8}$  in. near the heel-posts. Horizontal joints are made to occur at the several bulkheads, with outside covers riveted through to the double angle-irons of the bulkheads. Vertical joints have inside and outside covers: the inside covers butting home against the angle-irons of the frames. The deck-plating is  $1\frac{1}{2}$  in., the bottom  $\frac{5}{8}$  in., and the intermediate bulkheads range from  $\frac{3}{8}$  in. to  $\frac{7}{16}$  in. thick, riveted between double angle-iron frames. The gates are stiffened vertically by flat diagonal bars. Each of the bulkheads is provided with a manhole about the centre of the gate, which can be made water-tight with a cover if required, while the deck manhole has merely a loose cover easily lifted off by hand. The water is excluded in practice only from six lower compartments. In the seventh compartment from the bottom, openings are left in the plating on the river face, and the manholes above that level are left open, thus allowing the tide to ebb and flow freely in the upper compartments. By this arrangement a constant buoyancy is practically given to the gates at all greater heights of tide than 8 ft. over standard low water, the weight carried by the roller and lower pintle being reduced to a few tons, and at the same time the risk of the gates being floated off their hinges by any extraordinary high tides is got rid of. There are several instances of wrought-iron dock gates in which constant buoyancy at all states of the tide has been aimed at by increasing the section of the gates below low water level to the required extent, but the advantages thus gained are believed to be more than counterbalanced by the loss of simplicity in the design and the consequent increased cost of construction; the more so as such gates are seldom worked at or near low water. All rivets were specified to fill  $\frac{3}{4}$  in. holes, and the pitch of rivets at all water-joints is  $2\frac{1}{2}$  in., and elsewhere 3 in. Joints are single riveted, with the exception of the vertical joints of the inner or dock face, which are double riveted. In case of leakage into the buoyant chambers of the gates, a valve is fixed in the lowest compartment near the heel-post on the dock face, by which any water which may have got into the six lower compartments can be drained off when the dock is pumped dry. The upper hinge consists of a large cast-iron pintle, with a palm and three stiffening ribs. This is bolted to angle irons at the top of the gates. The anchor is also of cast-iron, let flush into and bolted to two large copingstones, which are strongly cramped together. To this anchor a cast-iron collar embracing the pintle is fastened with two  $\frac{1}{2}$  in. bolts. The pintle works in a brass bushing, both being covered by a brass cap screwed to the anchor and collar. The lower hinge is formed of a cast-iron bed-plate and pintle let into the ashlar floor of the entrance. To the underside of

the gate a heavy cast-iron inverted socket and heel-plate is bolted, the side plating of the gate being locally carried down for greater facility in attaching the casting. This socket fits upon the pintle beneath. An examination of the anchor of the upper hinge will show at once that its whole duty is to keep the gate in an upright position, and not resist any outward pull due to the weight of the gate. Provision is made for preventing any such outward pull by placing a roller under the toe of each gate. This roller travels on a cast-iron transverse plate led into the floor of the entrance chamber, and, together with the pintle at the heel, carries the gate. The roller is of cast-iron, 2 ft. in diameter, and is placed underneath the gate, a recess for receiving it having been formed in the lowest compartment. The cast-iron roller box and pedestal in which it is fixed form a sort of carriage upon which the gate rests, and this carriage bears at its inner end and upper side against two seats fitted to receive it on the underside of the angle iron stiffeners; its outer end projects beyond the outside plating, and is connected with a vertical wrought-iron shaft or spear. The spear is capable of being moved vertically in girders, so as to raise or lower the toe of the gate if necessary, the effect of pressing down the spear being to raise the gate, and *vice versa*. The vertical motion is given to the spear by a brass nut, working in a cast-iron frame attached to the outside plating, the upper end of the spear being a square-threaded screw. The nut is turned by a large spanner, worked either from the quay wall or from a light staging slung from the gangway above, according as the gates are open or shut. The heel, meeting-posts, and sill-pieces are of red pine. The heel-posts form one of the most important features of these gates. Unlike the usual form of lock or dock gates, there is no hollow quoin and heel-post, worked to a truly cylindrical surface, but in lieu of these we have a heel-post identical in form with the meeting-post. It will be seen, also, on looking at the sectional plan, that the gates are symmetrical at both ends. This heel-post, which is fixed eccentrically to the hinge, closes home to the smooth ashlar face of the splayed return, at the inner end of the gate recess, at the same instant that the meeting-posts and sills come in contact. The heel and meeting-posts are kept in position by two flange plates riveted to and projecting beyond the side plating, and are secured by caulking, the iron plates forming a dovetail recess. Hair-felt is interposed between the timber and iron. The direction of the joint at the heel-post is determined as follows:—The direction of the joint at the meeting-posts is in a line bisecting the angle between the gates, as in ordinary lock gates; now, if we draw a line through the longitudinal axis of the gate, the angles formed between this line and the joints at the meeting and heel-posts must be equal. The pressure of the water on the outside of the gates has then no tendency to produce any sliding motion at the joints. Mr. Wild, in his patent specification, recommends that these angles should not be less than 50 degrees. The sill-pieces are bolted to the inside plating of the gates, which is for this purpose carried down below the bottom of the gates, and stiffened with angle-iron ribs to resist the great pressure on the sill. There are also angle-irons above and below the sill-pieces to support them, and to allow of making a water-tight joint by caulking. A cast-iron nosing is fitted and bolted to the ashlar work of the pointed sill, and against this the timber closes. This arrangement of meeting and heel-posts has been very successful, and for many years the gates were remarkably water-tight, until the worm penetrated the timber so deeply that it has caused a considerable leak of late. So desperate have been the attacks of this creature, that before long it will be necessary to renew all the timber-work in the sill and posts. It may then be desirable to substitute either a harder description of timber, such as greenheart, or else creosoted timber.

\* By Mr. John P. Griffith, C.E. Read at meeting of Institution of Civil Engineers of Ireland, on Wednesday, the 11th inst. Robert Manning, Esq., C.E., in the chair.



One risk attending this form of gate should not be lost sight of—namely, the risk of subjecting the hinge to very severe strain should the heel-post come to a bearing before the meeting-post and sill, and the water be pumped out of the dock. If this took place, the heel-post would become the fulcrum, and the aggregate water-pressure would act with a leverage of something like 20 to 1 against the upper and lower hinges. As a precaution against this, the hinges should not be made too accurate a fit, but considerable play should be left, especially at the lower hinge, for the gate to be able to adjust itself.

The gates are surmounted by a gangway of 1½ in. planks, resting on wrought-iron brackets attached to the deck of the gates. The planks are secured to the angle irons of the brackets with coach screws, and the ends of the planks at the heel and meeting posts are protected by cast-iron usings. Originally the brackets were of cast-iron; these, however, soon got broken and were replaced by wrought-iron brackets. A strong hand-rail is fixed on the river side of the gangway, while on the dock side half balk timber-sheeting is carried up from the deck or top of the gates to about 15 in. above the gangway. These timbers are bolted to the heavy vertical angle irons of the brackets and form very efficient fenders to protect the gates against blows from vessels when the dock entrance is open, and ships are passing in or out. On the deck of each gate a crab winch, for opening and closing the gate, is secured, and worked from the gangway. The chains for opening and closing the gates work on the same barrel, attached at opposite ends of the barrel, and, of course, coiled in opposite directions, so that when heaving-in in one direction slack is paid out in the opposite. From the barrel the chain passes over rollers working horizontally at the top arrises of the gate, and then down the sides of the gate to groups of 3 guide rollers, two of which work vertically and one horizontally. These are very strongly bolted to the plating and framing of the gates at the bottom compartment. The ends of the chains are fastened to long bolts leaded into the ashlar masonry of the dock entrance and into the altars. The chains used are ¾ in. close link chain. This arrangement of crab winch appears to have considerable merit. The method usually adopted is to have two crabs to each gate, one to open and the other to close the gate, with chain wells and tunnels built into the masonry. In such a case complicated arrangements of rollers are required for directing the chains round angles. These are almost invariably the cause of much annoyance, from the difficulty of effecting repairs to them. In the present instance no wells or chain tunnels had to be built in the masonry of the dock, and there is but one crab and two groups of guide rollers to each gate. These rollers cannot, however, be said to be very satisfactory, as they have become fixed, probably from having been originally too tight a fit, and the chain has grooved them considerably. When a gate is difficult to work, the grooving of these rollers adds materially to the labour of opening and closing, besides injuring the chains. In the gates under consideration the rollers on the dock face can readily be got at for repairs, but those on the outside are below low water and out of reach, except to divers. There does not appear any valid reason for these rollers not being fixed, say at the level of the fourth compartment from the bottom instead of at the lowest. They would then be accessible at ordinary low water.

The construction and erection of the gates were not included in the contract for the construction of the dock, but was a separate transaction. This contract was undertaken by Mr. Robert Mallet for the sum of £4,165, which included the supply of all materials, labour, scaffolding, and plant, required for the gates, together with the necessary stone-cutting for the cast-iron sills, pintles, anchors, and transverse plates—the Port Board, then known as the Corporation for Preserving and Improving the Port of Dublin, undertaking

to keep the site free from water. Messrs. Fawcett, Preston and Co., of Liverpool, were the sub-contractors for the work.

The following are the quantities of material in the gates and their appliances as originally erected:—Wrought iron, 85 tons; cast iron, 24 tons; lead 4 tons; timber, 240 cubic ft.; brass, 3 cwt. The approximate weight of each gate is about 45 tons. . . .

The author thinks that the following inferences may reasonably be drawn from what has been recorded in this paper:—

1. That it is advisable to place such working parts as chain rollers in positions easily accessible, and not to make them fit too tightly on their axles, where they cannot be readily and frequently oiled.

2. That it is undesirable to use rollers for supporting gates closing dock entrances in tidal estuaries or rivers where silt is readily deposited, it being better in such cases to support the gates from their hinges alone, especially as this can be readily and economically done in the first instance.

Within the last few weeks about thirty tons of silt have been taken out of the particular dock entrance under consideration, and it must be apparent to all how injurious to the working of the gates even a very slight deposit on the roller path must be. The tendency of the roller will not be to clear the path of the deposit, but to roll it down, much in the same manner that a garden roller would roll a path, and at the same time to lift the gate slightly, the roller thus receiving more than its fair share of the weight of the gate. On the other hand, if the gates are supported by the hinges, sufficient clearance can readily be obtained between the bottom of the gates and the floor of the chamber to allow of their working freely, although a considerable deposit may exist, and this deposit can be removed from time to time when convenient.

The author must confess to having rather a leaning to the old-fashioned type of caisson for closing dock entrances which has no attachment to the masonry, but on being floated into position are sunk by water ballasting. A timber keel-piece fits into a grooved recess in the masonry, or closes against a smooth vertical ashlar face, forming the water-tight joint. When the entrance is to be opened the water ballast is pumped out and the caisson floated away. The caisson possesses the advantage over gates that it can readily be run upon a slip for repairs and painting; while, on the other hand, it is more difficult to move about, and requires a large recess for lying by when the entrance is open.

In conclusion, the author has much pleasure in acknowledging his obligation to Mr. Stoney, past President, for permission to describe these gates, and to Mr. R. L. Mallet and Mr. L. R. Johnson for much information and the loan of some of the original drawings of the work.

#### HOME AND FOREIGN NOTES.

**THE BUST OF THE REPUBLIC.**—A bust of the Republic, sculptured by M. Francia, has just been placed by the Prefect of the Seine in every *mairie* of Paris.

**TECHNICAL EDUCATION FOR BUILDING WORKMEN.**—The Working Men's College, Blackfriars-road, London, which was opened in January, 1869, for the purpose of giving the workmen of South London and their families the means of a thorough education, re-opened last Monday. Among the new classes are technical classes for carpenters and bricklayers, elementary classes in chemistry, modelling, and in mathematics, and a Civil Service class. Might not something like this be attempted in Dublin to supplement the teaching of our schools of art? and might not our Dublin Mechanics' Institute advance a little in the above direction?

**REMOVED STATUES AND "RESTORATION."**—The statues, representing the four doctors of the Latin Church, that were removed from the porch of Bristol Cathedral, have, says the *Bristol Times*, found a resting place on East Heselton Church, in the East Riding of Yorkshire. The

church has been restored, and the figures of the four doctors have been placed one on each of the pinnacles at the top of the tower. The restoration has been carried out at the cost of Sir Tatton Sykes. So far as eminence goes, the figures have gained by change of situation. There is a saying that "everything suffers by translation but a bishop;" the four Latin Fathers, however, are, says the Bristol paper, another exception to the rule. Still it appears an odd place to put them—the top of a tower.

**THE LATE REV. G. N. WRIGHT, A.M.**—This gentleman, who was a long time resident in Bath, passed away quietly and almost unnoticed, a few days ago, at an advanced age. He was educated in Trinity College, Dublin, and was the author of the "Historical Guide to Ancient and Modern Dublin," published upwards of half a century ago, which was illustrated by engravings after drawings by the late George Petrie. The deceased gentleman was an able writer, and author of the "Historic Guide to Bath," and about forty different works, or in all about 100 volumes. Several of his productions were somewhat similar in character to those he produced in relation to Dublin and Bath. We had hoped to have seen in some of our literary journals a more appreciative and extended notice of his life and literary labours than the scant paragraphs that have come under our eyes.

**TUMBLE-DOWN HOUSES.**—The roof of a public-house at the corner of Bride-street and Kevin-street fell in, a short time since, and buried three workmen who were engaged at the time in carrying out repairs in the shop. They received serious injuries, and one of them has died. It appeared that the house—a two storey one—had been propped up for some time, and was in process of being partially rebuilt. It showed signs of falling on the previous day, and eastoners were warned not to enter. When the roof fell in it carried the floor and portion of the wall with it. The fall of several other houses north and south of the city may be anticipated, as there are hundreds of them rotten from basement to roof-tree. When they do fall, it is a pity that the innocent should suffer for the guilty. The picture of a few T.C.'s on crutches might lead to a little more caution in future. From Drogheda we learn that the flooring and roof of two three-storey houses in Peter-street in that town gave way at an early on Tuesday morning. The occupants barely escaped with their lives. The property, it is said, belongs to a T.C.

**WEIGHTS AND MEASURES.**—What has our worthy Lord Mayor and the rest of the City Fathers to say to the following resolution passed at a recent meeting of the Grand Jury of the County Kildare?—"The Grand Jury of the County Kildare being informed that there is no set of Imperial weights and measures kept in Dublin, or Ireland, for the official testing of the several weights and measures throughout Ireland, as required by the Act of Parliament, the Grand Jury would suggest that to save the expense, trouble, and damage to weights and measures in transit to and from London, an Imperial set of weights and measures be officially kept by the government in Dublin, for the testing of the several weights and measures belonging to the several counties and towns in Ireland." We are in favour of a strict scrutiny of all the weights and measures used by traders in Dublin, but let us first be assured that those used for testing by the Corporation of Dublin are correct. The poor, without doubt, are shamefully plundered in this city by unprincipled shopkeepers using light weights and false measures.

**BURSTING OF A RESERVOIR, U.S.**—Terrible destruction has been caused by the bursting of a reservoir dam at Staffordville, a manufacturing town in Providence, United States. The reservoir was a mile long by nearly half a mile wide, the water being used for milling purposes. Heavy rains had filled the dam, and about six o'clock on the evening of the 27th of March the water tore away the bank and flowed down the valley like a cataract, destroying everything in its course. Several bridges on the railroad and highway were swept away. The National Bank at Staffordville, the Congregational Church, and several stores and houses were destroyed. Two mills were damaged, and in all about thirty buildings were demolished, while several manufacturing have been thrown idle. Fortunately, the people living in the village below the dam were forewarned of the danger, and had time to escape to a place of safety, but two men who remained behind were drowned. A portion of the railway was carried away, and two railway bridges, one 148 ft. long. The actual loss caused by the disaster is set down at nearly half a million dollars. The water was 30 ft. deep, and advanced through the gorge like a wall of water. Not a tree was left standing along its course, and the ground was furrowed to a depth of 35 ft.



**WICK HARBOUR WORKS.**—The works at Wick Harbour have suffered terribly during the recent storm. Large portions of the masonry of the breakwater have been thrown into the sea, much of the building is shaken, and a great portion has become a mass of ruins. Between the parapet and the sea a vast deal of the structure has been hopelessly destroyed, while portions have been completely demolished. Another such gale would, it is said, have a very serious result, but, as it is, much of the work, on which about £150,000 has been expended, is rendered useless.

**OUR CANAL AND BRICKYARD POPULATION.**—Mr. George Smith, of Coalville, who has already done humane and useful work in the interest of the brickyard and brickfield children in the sister kingdom, is now giving addresses in different places on the deplorable condition of our canal population, and those employed in canal boats. In one of his latest addresses he related some of the heartrending things he had seen in connection with his work among the brickyard children, and more recently since his investigation into the inner life of the canal population. If only half be true what he said with reference to the numbers, state of education, wretched habits and modes of living of the poor women and children of all ages buddled together in boat cabins, the Government has not begun one minute too soon, and we hope the Home Secretary will not stay his hand until the boaters are treated as human beings living in civilised England. The above subjects need a ventilation on this side of the channel too, but none of our sanitary authorities seem to trouble themselves in these matters.

**ROMAN TESSELATED PAVEMENT.**—During some drainage works now being carried on at Caerleon-on-Usk a very interesting discovery of Roman tessellated pavement, coins, and objects of minor value has been made. The present discovery bears out the tradition that the city suffered from a severe conflagration, as a stratum of charcoal about 4 in. thick has been observed through the whole length of the cutting, and about 3 ft. from the surface. The pavement was found in Blackhall-street. It was evidently the floor of an apartment, about 30 ft. by 16 ft., the walls of which were standing tolerably perfect to the height of 2 ft., and were found to be decorated with coloured garlands. The design of the pavement is a floral one, highly ornamental, and worked out in six colours—viz., red, yellow, green, grey, black, and white. The pavement was laid in concrete upon flat tiles, beneath which was a hypocaust. Unfortunately the pillars supporting the pavements were found to have given way in several places, but as much as possible has been removed to the local museum, which contains a large variety of Roman remains previously discovered. The coins found were four in number, all bronze, and of the reign of Vespasian.

**SEWAGE AS AN INVESTMENT.**—There is now a considerable range of experience as to the financial value of sewage processes, and as none of the many companies which have grappled with the problem are either paying dividends or likely to do so soon, the practical result may be considered discouraging. A commission, appointed by the Local Government Board, has examined and reported on all the principal experiments now in operation. Its conclusion is that in no case has sewage yet been reduced to a marketable result capable of covering the cost of production. In its report it says distinctly that "none of the manufactured manures made by manipulating town's refuse, with or without chemicals, pay the contingent costs of such modes of treatment; neither has any mode of dealing separately with excreta so as to defray the cost of collection and preparation by a sale of the manure been brought under our notice. Town sewage can best and most cheaply be disposed of and purified by the process of land irrigation for agricultural purposes, where local conditions are favourable to its application; but the chemical value of sewage is greatly reduced to the farmer by the fact that it must be disposed of day by day throughout the entire year, and that its volume is generally greatest when it is of least service to the land." This does not sound well for shareholders in sewage utilising companies, but they must have a secret source of vitality independent of balance sheets. Some of them are having their shares run up on Stock Exchange as gaily as if Messrs. Rawlinson and Read had predicted a brilliant future for them. But shareholding patience will wear out at last, and the task of utilising sewage will revert to the public authorities with whom it should have been allowed to remain.—*British Trade Journal.*

#### TO CORRESPONDENTS.

RECEIVED—W. H. C.—An Artisan—R. B.—An Old Subscriber—E. C. (Cork)—M. D.—Architect—P. C.—M. A. (London)—H. R.—W. C.—G. F.—A. B.—&c.

**EPPE'S COCOA.**—Some time since, in a series of articles in these columns upon food, we spoke in terms of unqualified praise of Messrs. Epps and Co's "Prepared Cocoa." The opinion we then expressed as to its purity and nutritious qualities has been fully endorsed by the public, as shown in its increased and steadily increasing consumption. We believe that Messrs. Epps's Manufactories are now the largest of the kind in the three kingdoms, and the total quantity of "Prepared Cocoa" consumed at the present time approaches four millions of pounds annually. This result is not surprising. The dietetic properties of native cocoa are well known, but in the form prepared by Messrs. Epps, Homoeopathic Chemists, they are rendered additionally valuable, both on account of their increased nutritive power and digestible character.—*Civil Service Gazette.*

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NEW CATHOLIC CHURCH, TEMPLEMORE.

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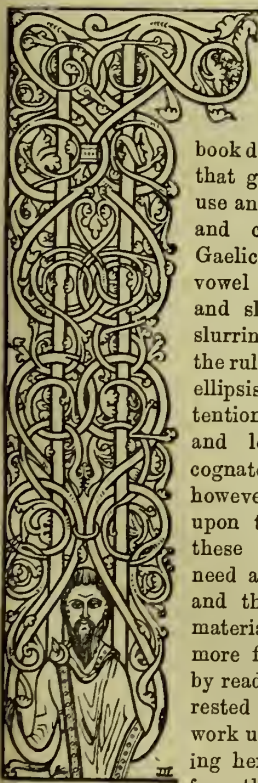
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THE IRISH BUILDER.

VOL. XIX.—No. 417.

THE ARYAN ORIGIN OF THE GAELIC RACE AND LANGUAGE.\*

THIRD NOTICE.



T was our intention to have given a digest of the chapters in Canon Bourke's book dealing with the laws that govern or affect the use and sounds of vowels and consonants in the Gaelic language—i.e., vowel assimilation, broad and slender vowels, the slurring of consonants, the rules of aspiration and ellipsis in Irish, the retention of certain prefixes and letters, and other cognate matters. We find, however, if we entered upon the discussion of these subjects, it would need a series of articles, and the reproduction of material that could be more fittingly availed of by readers specially interested by consulting the work under notice. Parting here for the present from the subject of philo-

logy proper, we will pass under review some of the arguments advanced by Canon Bourke on the origin and uses of

THE ROUND TOWERS.

Recently in this journal a series of articles appeared, extending over several months, entitled "The Literature of Gothic Architecture in Ireland." In these articles the views of all the principal writers on the

Round Tower controversy were exhaustively reviewed, and strict justice was done to every writer, by the statement of his opinions, and the reasons which he advanced for their belief. Whilst the writer of the articles in this journal advanced no distinct opinion as to the special uses for which our towers were erected, still he was convinced, by a careful consideration of the subject, and the weight of the authority on what had been long the unpopular side of the question, that the Round Towers belonged to the Pagan period, and were built long centuries previous to the introduction of Christianity into this country.

Canon Bourke also reviews the opinions of his predecessors who have written on the Pagan and Christian side of this vexed subject, and he is unhesitatingly of the opinion that they belong to the former class. Much of what has been stated by Canon Bourke against the views of the early Christian and Danish origin of our towers has been already stated in other words in our own columns and by other native writers. The Canon holds that these towers were built in the early Pagan period by those of the Aryan race who settled in this island, but that after the gospel was preached St. Patrick and his followers turned these buildings to the service of Christian rites.

In discussing the theories previously held and put forward by antiquaries and writers of acknowledged reputation on the Danish and early Christian side, Canon Bourke evidences considerable knowledge and grasp of his subject, and has not been slow to detect the weakness of most of the arguments which were previously advanced, particularly by the advocates of the Danish theory—a theory which we have always considered most fallacious, for the case built up for acceptance by the writers of this school, from Molyneux to Ledwich, must have been found on examination utterly untenable. With the death of the last-named antiquary the great defender of the Danish theory passed away.

The opinions of George Petrie, both during his lifetime and since, were entitled to the most respectful consideration, for his services were most valuable, apart in the field of archæology and Irish history. Petrie's views were, however, illogical, and in supporting the Christian theory of the origin of the Round Towers, of which theory he was perhaps the greatest champion, he failed to produce proofs in support of many of his assertions. Canon Bourke ably and logically combats Petrie's opinion that the Round Towers were erected at various periods between the fifth and thirteenth centuries. He admits that there were ecclesiastical stone buildings erected in this country during the seventh century; but when the primitive architecture of Ireland is classed with the English Norman of the twelfth, it becomes quite another thing. "In all the Anglo-Norman specimens of architecture," writes the Canon, "there is found one feature common and uniform, namely, the jambs of the doorways and windows are parallel; in all the specimens of the early Irish architecture, the doorways and windows are wider at bottom than at top. This constitutes, if no other were found, an essential difference between the two styles—the early Irish and the Anglo-Norman." Further on, Canon Bourke writes, "The great objection hitherto used against the opinion that the Round Towers are of Pagan origin is, that our Pagan progenitors had not, they say, as far

as can be known, knowledge or skill, and practical power to erect such superstructures."

"Hitherto," says Petrie (page 2), "we have had little on the subject but speculation, grown out of a mistaken and unphilosophical zeal in support of the claim of our country to an early civilization; and even the truth having been advocated only hypothetically, has failed to be established, from the absence of that evidence which facts alone could supply. This objection fades away under the increased knowledge which the light derived from the science of comparative philology sheds on the early history of the Irish race. The early Irish were Aryan, therefore they were a race possessed of skill and power to erect these towers." The argument put in another form, as the Canon shows, though it does not prove the Pagan Irish built the towers, it shows they were skilled in sciences and arts, and that they possessed a knowledge of architecture, sculpture, dyeing, and painting, and consequently they had a knowledge and power sufficient to erect these enduring piles of masonry. Secondly, he shows the argument receives additional force from the similarity that exists between the architecture of the Round Towers and that displayed in the Cyclopæan buildings in the East; or, to put it in Canon Bourke's own words, "Sameness of architectural features points to identity of origin. But the Round Towers of Ireland present, in the slanting doorway, in the style of arch, in the material used, in the cement, in the shape and size of the stones, and in the manner in which they are laid, architectural features which are nowhere to be found except in the Cyclopæan edifices of the earliest period. Therefore, the Round Towers have been built by men skilled, at the very earliest period, in the Cyclopæan style of architecture."

In the course of his chapters on the Round Towers, their history, and that of cognate structures, Canon Bourke discourses on the motives that urged the ancients to build, and shows that kindred motives most likely urged their descendants. He thinks that there is not the shadow of doubt but all those who emigrated from the cradle home, either to Syria or to Palestine, to Armenia or to the East, as far as Hindus, and beyond it, or turning southward to Egypt along by the Nile, or to Europe, Greece, Etruria, and to this western isle, had been influenced by the same desire to render their names imperishable, and themselves, as far as could be, immortal.

The same motives, it is argued, would be sufficiently strong to urge in after years the leaders of the migratory bands of historic peoples to settle down as they did, and erect pillar towers—monuments like to those, but not quite so massive as they had seen built in the cradle land of their race. Canon Bourke has no doubt that in after times some of these pillar piles served as prison fortresses, as, for instance, that at Aileach, in the county of Derry, built seventeen hundred years before the Christian era. This Rath, or Cathair, at Aileach, is said to have contained a round tower in it, and the grounds for this statement are furnished by a poem in the Book of Lecan. This poem will be found in the "Ordnance Memoir of Derry," relating to the parish of Templemore, where an English translation is given by Dr. Petrie. To put it in Canon Bourke's words, "It

\* "The Aryan Origin of the Gaelic Race and Language; The Round Towers; The Brehon Law; The Truth of the Pentateuch." By the Very Rev. Ulick J. Bourke, M.R.I.A. Second Edition. London: Longmans, Green, and Co.



appears from this very ancient poem, that not only was the outer Rath or protective circle of Aíeach built of stone by the regular masons, *Imcheall* and *Garbhan*, but that the palace and other houses within the enclosure, were built also of stone (nay, oven clipped and cut stone). All these buildings probably were circular, as the prison of the Hostages certainly must have been, when as the poem says, it was 'closed at the top with one stone.' Were these Round Towers? Well, in this particular instance, we would rather hesitate in answering the query that the buildings alluded to were Round Towers proper, although they might have been structures of a rotund shape. The evidence is, however, otherwise valuable, for it points to and proves the erection of stone structures of no mean order at a very early date in this country, and of the existence of constructive skill amongst the early Pagan Irish.

Canon Bourke does not attempt to decide at which precise period or periods the Round Towers were built; but, in stating them to be the work of men skilled in the art of building, and in seeing that mankind possessed greater knowledge some two thousand years before the Christian era than at a later period, he is of opinion that the Round Towers must have been built at that time when men were best skilled in science, and in the arts of building. "The records in stone in Egypt, in Syria, and Persia, tell us that this was the earliest period after the Deluge, when men were Cyclopean, if not in stature, at least in power of mind. Comparative philology proves the truth; and it is quite in accord with all that civil and sacred history testifies."

Which of the migrating races built the Round Towers?—the Fomorian, as stated by Vallancey; the Tuatha-de-Dannans, as asserted by Henry O'Brien, and intimated by the late Sir William Wilde—an opinion also supported to some extent by our annals. Was it the Firbolgs, or the Nemedians, or some other unknown Celtic race? These are queries put by Canon Bourke; but, they are difficult to answer, for there might have been other early settlers, and even those named may not have been rightly described or in due chronological order. Our early records are not unerring; fact may be, and no doubt is blended with fiction, but in this respect Irish annals do not stand alone. Fiction and errors are blended in the recorded histories of all nations.

In considering the subject in all its bearings Canon Bourke says:—"The only fair answer, therefore, that can be supplied from the pages of Comparative Philology and Paleontology is, that these who built the Round Towers had been Aryans, therefore, clever to plan and courageous to execute, that they were of the Celtic stock; and that they were amongst the very first settlers in this Isle of Destiny. Comparative philology knows nothing about such names as Fomorians, or Firbolgs, or any of the six migrations named. The terms 'Fomorian' (sea robber), 'Firbolg' (bagmen), are accidental. Paleontology deals with races, not parties of a race by a technical name. They came, not only at different periods, but they came by different routes, and though originally of one stock, they presented a change at an early period in their physique and in their character."

The Round Tower question in the book under notice is treated specially in its bear-

ing upon the Aryan origin of the Gaelic Race and Language, and not strictly as an archaeological or rather an architectural question. How mere artists, or antiquaries, and historians, have discussed the question, many are aware, but how architects have treated it is less known. In our recent series of articles we gave a digest of two practical architects' views—Mr. Wilkinson, who may be said to be a geologist as well as a practical architect; and the late Richard Rolt Brash, who was a practical architect, a historian, archaeologist, and antiquary combined. The latter did not believe in the ecclesiastical origin of the Round Towers; and in his "Notes on the Round Tower Controversy," he certainly proved Petrie and his supporters to have asserted much and proved too little. Brash also carefully examined and exploded the Belfry Theory; and, had he lived, no doubt the Irish public would have been presented with a book from his pen supporting in detail the Pagan origin of the Round Towers. In his work, published shortly before his death, on "The Ecclesiastical Architecture of Ireland to the Close of the Twelfth Century," he conclusively proved that the towers were not originally erected for christian or ecclesiastical purposes though they were converted afterwards to those uses, and that many additions and insertions of later work are apparent in their architecture.

By way of finis for the present, we may observe that Canon Bourke's book is a singularly able and instructive one, and we hope that it will run through many editions. In any future issues of the work, we trust the text will receive a more careful revision than the two already published editions evidence. The copy under notice has we are sorry to say, many errors, though most of them are of a nature that the careful and intelligent reader will be able to correct himself. The index, too, needs a better arrangement, and if the work was principally written for scholars alone instead of for a general class of intelligent readers, we would be inclined to recommend the omission of sundry matters that are not necessary. We do not like to be fault-finders, for, apart from what we have just stated, the book deserves to live, and be widely known at home and abroad.

#### CRIMINAL ARCHITECTURE AND CRITICISM.

UNSPARING professional and general criticism has of late been getting too hot for the unprincipled tribe of speculative builders known in England by the appellation of "Jerry." A few of them have been brought to book of late in the sister kingdom by district surveyors and sanitary officers, and a few more have narrowly escaped being indicted for manslaughter in instances in which the wretched houses they had erected had tumbled, resulting in loss of life, in consequence of the non-cementing qualities of the road mud mortar which they used in the brickwork of their walls, coupled with the general scamping manifested in every branch of the workmanship and materials of the houses which they erected.

We notice, too, in the reports given in London professional and English provincial journals, that some of the "Jerry" tribe, driven to bay, and smarting possibly under the chastisement inflicted upon them by professional critics, have naturally turned on their persecutors by enlisting the aid of

the law to vindicate their blemished characters.

It is a matter of extreme regret that the law of libel is not better defined, and that it should be so elastic in principle as it is at present. A "scamping" Jerry builder may be caught in the act of openly infringing the building acts, and acting in direct violation of the sanitary acts, and using rotten and worthless materials; but unless district and local board surveyors or medical officers of health with an independent spirit take up the matter, and force their respective boards to prosecute the delinquents, the rascals are likely to escape, finish their "murderous houses," and commence *de novo* to manufacture more of the same class. We regret to say that parish surveyors are not, as a body, as vigilant as they should be; and instances have come under the writer's knowledge in which some of them have played into the hands of unprincipled builders and sewer contractors, and allowed work to pass which would not stand a professional examination. On the other hand, we have known many district surveyors who, against all odds, have manfully performed their duty, and we trust their number will continue to increase. In London, it may be remarked, the local boards and vestries have their parish surveyors, who are distinct from another class of district surveyors appointed by the Metropolitan Board of Works. Both classes of surveyors are not rendered, in consequence of the nature of their appointments, as independent as they should be. The surveyors of the local boards are the servants of their respective bodies, and a large percentage of the members of these boards are publicans, small tradesmen in various branches, and not a few of their number owners or landlords of a low class of house property, and "Jerry" builders as well. When these facts are considered it will be seen what independent-minded surveyors, medical officers of health, and other local board sanitary officers have to contend with. If they reported every infringement of the sanitary acts, or recommended prosecution in flagrant cases, they would be placed directly in the position of being prosecutors of their own employers or masters. It is, of course, rather an invidious position to occupy; but we have known instances of public servants boldly grappling with the difficulty, and often with the result that in a short time their masters of the local boards made their places too hot for their servants by annoyance and trumping up charges of neglect, ultimately compelling or forcing their paid officials to resign.

The Metropolitan Board of Works district surveyors are, if not directly, indirectly acted on, and their independence sometimes sapped through causes similar to what we have already described. The members of the Metropolitan Board of Works are made up of representatives from the vestries and district local boards of works, and the district surveyors are still overshadowed by the same evil that their brother surveyors in the parish boards have to contend with. It is not necessary for us to go into detail to show how the wheels revolve within wheels; but the fact is apparent, that the tribe of "Jerry" builders in London, with their representatives and sympathisers in the local boards—often one and the same,—have hitherto been too strong for any crusade directed against them by the sanitary officials. The Local Government Board occasionally acts, when



furnished with data by a number of combined ratepayers; but it is not the first or immediate duty of ratepayers—who have to bear the brunt of taxation and sanitary administration—to act, but the obvious duty of the local and sanitary boards to put the law in force against all offenders, whether of their own bodies or outsiders.

The duty that by right devolves upon urban and rural sanitary authorities is too often shirked, and the neglected duty is too often performed as a public or *quasi* public duty by professional and general journalists, and at a great risk, as the result of recent law proceedings in the sister kingdom and capital plainly and conclusively prove. "Jerry" builders may build houses with rotten materials, and scamp to their heart's desire in the matter of foundation and drainage; but if the public journalist dares to point him out directly, and warns others of the "deep damnation" of his practices and contact, instantly comes a letter from some pettifogging attorney, demanding substantial damages and abject apologies. If the journalist refuse to accede to either by paying off-hand some few hundreds, and eating dirt into the bargain, down comes a writ to further annoy and worry him. The leading morning journals are too much occupied with parliamentary and Eastern questions to devote time to mere parochial, social, and suburban topics; and it mostly devolves upon local journalists in the metropolitan outlying districts to report upon these matters. The suburban neighbourhoods of the large cities and towns of the three kingdoms are the great fields of Jerry speculation and enterprise. On these happy hunting grounds will be found speculators of all kinds—land jobbers, money lenders, free holders, auctioneers, undertakers, and "Jerry" builders or "Jerry" workmen, aspiring to have their hands in the pie and to be dubbed builders (bless the mark!). Between free holders and lease holders, the money lenders on one side, and the needy building scamp on the other, the job is arranged. Low swamps, or veritable rubbish shoots, are plotted out into "eligible sites," and soon "eligible residences," residences in rows, and streets of houses crop up. The houses are unmistakeably built to sell and not to last, and unfortunately they prove too often in their results that they were also built to kill; but no journalist having the fear of God before his eyes, and the fate of some of his brethren, must whisper that Mr. Jeremiah, the joiner, or, mayhap, jobbing bricklayer or handy hodman, is aught less than a most upright, downright, straightforward "brick" of a fellow! We have had under our eyes recently two cases of prosecutions against newspapers sued for damages for alleged libel, in which the defendants had overwhelming evidence, corroborated by independent professional witnesses. Though no damages were obtained in either case, the defendants were mulcted in heavy costs, on account of the severity of the language used, which was construed to be libellous.

Now, as long as writers, denouncing flagrant public evils, whether belonging to public companies or building mal-practices, are content to deal in vague generalities, no good, or very little, can be accomplished in stamping out abuses. Criticism, to be effective and reforming, must be pointed; and where the statements can be proved, it is the duty of the sanitary authorities, if it relates to the infringement of the laws of

public health, to take action, and prosecute to conviction the delinquents, no matter who they may be. It is not every journalist who can afford to lose time and money, as well as evidencing an independent public spirit. We would like to see something like a tacit understanding among newspaper proprietors to support each other, irrespective of sect or party, in law-suits instituted against their brethren in upholding the important question of public health, and in condemnation of all acts carried on to its injury. If criticism is judicious, and called for, the critic with qualifications for his task should be upheld and supported by a combined sympathetic public opinion; and also in a practical manner, if his case is one that truly deserves and needs such support. We thoroughly endorse the opinion of one of our sanitary contemporaries as regards criticism on sanitary matters, believing with it that such criticism is not only needed unsparingly all over England, but all over the three kingdoms.

### FAMILIAR CHAPTERS UPON SCIENCE.\*

(Continued from page 113.)

#### NO. IV.—THE ANTIQUITY OF MAN.

*The Glacial and Interglacial Periods—Barbaric Man—Flint and Stone Implements—The Palæolithic and Neolithic Ages—Modern Authors' opinions of the Antiquity of Man—The Skeleton of Mentone—Desultory Thoughts.*

A RECAPITULATION of some of the remarks we have made in a preceding chapter may not prove uninteresting, because they have a direct bearing upon the antiquity of our race. In it we have endeavoured to describe the vast, almost incredible, physical changes which have taken place during far off ages in the geological condition of Great Britain and Ireland, as well as parts of Continental Europe; and how these islands were more than once united to the North Polar regions by one vast sheet of ice, presenting a treeless scene of Arctic sterility; at another period joined to and forming a portion of the Continent—the whole enjoying a genial, temperate, and perpetual summer; and again, a nearly tropical clime; then submerged beneath the ocean wave, and converted into clusters of small islands, formed by the principal mountain tops, where the waters of the Atlantic and the German Ocean dashed wildly against their summits, or placidly laved elevated table lands at the height of considerably over one thousand feet above the present sea level. Again, the scene changing, Arctic temperature once more prevailed; and again they are enveloped in one continuous frozen mantle, then gradually the climate ameliorated, and at length the temperate region they now exist in was called into being. What induced these changes is not our purpose now to enter upon, further than that astronomy reveals the position of our hemisphere was in these ages so placed by Almighty power with regard to the sun, as to confer upon it a most intensely severe climate, and *vice versa*.

Records innumerable exist to prove that when man first became a denizen of European countries, he existed in the depths of barbarism; he fashioned his tools and implements of flint in the rudest possible manner, and he knew no other material which he could convert to his use, either to supply his daily wants, or utilise as weapons of defence. This period is called the Palæolithic, or old stone age, in contradistinction to the Neolithic, or new stone age—when man, who although he still remained in a state of barbarism, had learned to apply a higher finish to, and even to polish, his stone implements. Hatchets, chisels, and knives, made of flint and stone, belonging to these primitive races, occur numerously in river and cave deposits

all over England, Scotland, and Ireland, more particularly in the latter; and it is singular many of these are found embedded beneath, and often in close contiguity with, the fossil bones of both Arctic and Tropical carnivora, and herbivora. In a few instances human bones have been discovered in England and in Wales, with these remains—but the flint and stone implements very generally, tending to show that man was contemporary with the former animal inhabitants of these islands. Modern geologists, therefore, assume that the antiquity of the human race is greater than is generally supposed. We will not enter upon this question, but only remark that unless these animals, denizens of such widely different zones, lived and died in the land, their remains, and those of others now extinct, could not be entombed in the situations they are found in. Where the bones of man and his works occur in conjunction with them, it does not appear unreasonable to think he lived and flourished amongst them. Mr. James Geikie, in his "Great Ice Age," goes so far as to state that man has witnessed all the great geological changes we have described as occurring in these islands.

The Jardin des Plantes, at Paris, though sadly despoiled of its former attractions, now contains perhaps the most interesting memorial of humanity in existence. It is the skeleton of a man, nearly perfect, and in a fair state of preservation, which was discovered in March 1872, by Dr. Rivière, in a cave at Mentone, in the south of France. It is that of an ordinary sized human being; the skull is covered with a number of perforated marine shells, and twenty-two of the smaller teeth of the stag, which you are informed once probably was a chaplet round his head. A bone instrument lies across the forehead, and the teeth are greatly worn, as if from chewing hard food—as is observed in modern savage races. The attitude he was found in, according to Lyell, indicates he died in his sleep. Numerous unpolished flint instruments were found with him, and in the soil above lay numerous remains of animals of cold, tropical, and temperate climates; but we will give the late Sir Charles Lyell's description from Dr. Rivière's own account. "One of the most interesting discoveries of late years of the remains of man, together with flint implements, and the bones of extinct animals, was made in March, 1872, by Dr. Rivière, in a cave at Mentone, in the south of France. While Dr. Rivière was engaged in a scientific mission for the exploration of the well-known quarries and caverns near Nice and Mentone, he found *in situ*, in a cave, called La Barma du Cavillon, on the Italian frontier, the bones of a human foot. He immediately began a careful excavation around the remains, and after eight days' labour disclosed an entire human skeleton, at a depth of 20 ft. The cavern is a triangular slit in the rock, about 30 ft. wide at the base, and from 60 to 80 ft. in height, and extending from south to north without any marked curvature 45 ft. into the cliff; from its form and dimensions the full daylight reaches to the inner end, and thus enabled Dr. Rivière to have an excellent photograph taken *in situ*. The body lay in the longitudinal direction of the cavern, about 24 ft. from the entrance. Surrounding and above it were 50 unpolished flint flakes and scrapers, and a fragment of a skewer about 6 in. long.\* Mr. Pengelly, whose opinion, from his long experience in Brixham and Kent caverns is of great value, visited Mentone a few weeks after the skeleton was removed. The exploration was still going on, and he saw 300 flint implements, all unpolished, which had lately been exhumed. 'There was no metal,' he says, 'found in the cavern, nor was there any pottery, nor any polished flint implements.'†

Sir Charles Lyell goes on to enumerate by their scientific appellations the different fossil remains superincumbent in the soil

\* By William Hughes, author of "Geological Notes of Ireland." Dublin: M. H. Gill and Son; W. H. Smith and Son, 1876.

• Comptes Rendus de l'Acad. des Sciences, Avril 29, 1872.  
† Journal of London Institution, vol. lii., No. 18.



over this skeleton, and as we translate them they are the ox, the bear, the tiger, the hyena, the rhinoceros, the wolf, the stag, and a multitude of other smaller animals.

It is in former river beds, and banks of rivers whose courses have been changed, and in caves, that these remains are more frequently found—though sometimes discovered in gravel under an enormous depth of peat. The caves are known to be part of the courses of subterranean rivers, and to have been originally formed by the continuous action of water holding carbonic acid in solution—rivers rushed through them—and may it not have been that devastating floods have gathered together and enveloped in one heterogeneous mass, the memorials of man and of animal life of widely different and differing races and periods? The man of Mentone may have died upon the spot where he was found by Dr. Rivière, and his remains might have been afterwards entombed in alluvium, which carried with it the records of life which preceded him, and which possibly existed thousands and thousands of years before his time.

We know such opinions as these differ widely from many who have made this subject their study; therefore, we must leave our readers to draw their own conclusions from the evidences we have laid before them.

Were we to place implicit reliance upon the theories so ably advanced by modern authors, we must believe that man's period here on earth dates back very many thousands of years further than the data we have of his existence. It is sometimes difficult, but never impossible, to reconcile the discoveries of science with revealed religion. In our writing it has always been our endeavour to do so, and we have no doubt that all who study this subject dispassionately, will agree with us in thinking it is far better to attribute to natural causes, and causes within easy interpretation, the supposed great antiquity of the human race, which, after all, no one has ever yet proven.

#### CORRESPONDENCE.

##### THE NEW RULES OF THE R.I.B.A.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—In your recent leader on the above subject, the writer has fallen into an error about the mode of payment for quantities required. It is not stated that they are "to be paid for by the client direct." The last word was certainly proposed at the meeting but rejected, and it is not meant that the new rule is to interfere with what has hitherto been the established, and is in fact the legally recognised usage, namely, that quantities, whether supplied by the architect or otherwise, shall be paid for by the builder who may get the work. Of course we all know it is with the client's money, and being, as is rightly enough required, with his concurrence, comes to the same thing in the end; but the interpolation of the word "direct" in your article is decidedly calculated to lead to a wrong impression.—I remain, &c.,

F.R.I.B.A.

##### IRISH ARCHITECTURAL REPRESENTATION.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—May I ask, through your columns, what are Irish architectural bodies thinking about, or doing? Shortly after the arrival of our present Viceroy, I observed that a deputation of the Irish Institute waited upon his Grace, to urge upon him the necessity of the Government making some arrangements for a representation of their interests in the intended Science and Art Museum. Since that time some months have passed over, and I have not witnessed, through your columns, a report of any meeting held in either of the architectural bodies, or the publication of one paper read at their meetings, supposing they have been held. What proof is being given that the Royal Institute of Architects of

Ireland is a living, active, and representative body, and that the Irish Government are warranted to interfere in their behalf, or on that of the profession? A body, or bodies, that afford the Irish public no evidence of their existence, or their work, are scarcely in a position to have their claims seriously considered. In London, Glasgow, Manchester, Liverpool, and in other English and Scotch towns and cities, we are constantly afforded in your pages, and those of your English contemporaries, constant proofs of the activity of their architectural societies; but in Dublin none, or next to none. Occasionally, indeed, after a long silence for several months, utterings, as if from the grave are heard, and anon there is a churchyard stillness again. The Royal Institute of British Architects has reformed itself, I am glad to see; and is it too much to hope that the Irish Institute, as a preliminary to reform, will awake from its slumber, and decently, if unable to live from sheer exhaustion or other occult diseases, sign at once its last will and testament—I am, sir, faithfully yours,

A PROVINCIAL ARCHITECT.

Belfast, April 26, 1877. \*

##### KINGSTOWN COMMISSIONERS.

A MEETING was held on Friday, James Barrett, J.P., presiding, and eight other members attending. Mr. Kelly reviewed the evidence relative to deviations from sewerage plans given before the Inquiry Commissioners. He said in one case 100 yds. of piping was substituted for the same length of a brick drain. He believed the board would be subjected to some £1,000 surcharges in these matters. He moved for the employment of an independent engineer to report on the whole matter; also that Mr. T. Sexton (the contractor) be requested to surrender one of the sewerage contracts. The resolution was seconded. Dr. Roche held that the deviation in question was a proper one, and moved that no inspector be engaged. This amendment was also seconded. Mr. Sexton (the commissioner) asked that the question might be raised—Was the deviation allowable? The chairman said there was no doubt it was not. Mr. Kelly urged that the board could not "have the face" to lay out £7,000 more on drainage till these matters were cleared up. Finally, a committee of inspection was appointed, and the main resolution postponed. A committee then proceeded to Dublin to remonstrate with the Corporation for taxing unoccupied houses in Kingstown on the water and general road rating.

##### "JERRYISM," AND SHAM PATRIOTISM.

A CORRESPONDENT asks us have we noticed, though he has no doubt that we have, that "within the last few years a number of building speculators of the 'Jerry' class have been running up streets of houses north and south of Dublin, but particularly on the former side, to which streets they have given the name of Irish patriots and worthies, and other kindred names?" He says these houses have been built to sell, to let, and not to last; and he wishes to be informed has the Borough Engineer, the Medical Officer of Health, or the visiting members of the Dublin Sanitary Association, ever paid a visit to these new streets of houses, and examined their design, the materials of their construction, drainage, sanitary requirements, and other matters. Our correspondent also adds that similar streets and villas of houses are now erecting in the suburban districts, to which royal and aristocratic and foreign names are being given, said houses also being built to sell; and he warns investors to be careful of parting with their money, as they will regret it for the rest of their lives.

We have no objection to the use of a patriotic street nomenclature, if no one is imposed upon otherwise. Whether pseudo patriotism and "Jerryism," so called, have

been making unhealthy alliances might be a matter for further inquiry, as false pretences are made to cloak many nefarious practices in other fields as well as in building operations. Between patriotic sentiment and practical "scamping" there is, however, a wide difference, and we are more concerned in helping to expose the latter than discussing the surroundings of the former—at least in those pages. One thing is clear enough, that our sanitary officials in Dublin have not paid, and are not paying, any attention to the question of new buildings in this city, and streets of houses of a most inferior class, are being erected by wholesale without the least supervision.

##### SANITARY AND OTHER NOTES.

**RAT KILLING.**—It is said that an inmate of the Armagh Union Workhouse killed within the space of twelve months the enormous number of 1,717 rats. He was rewarded with two sovereigns for his industry.

The guardians of the Mountmellick Union having failed to obtain tenders for the drainage of Maryborough, which has been estimated to cost £500, it has been resolved to divide the plan into three separate parts, and to invite tenders for each; at the same time, the contractor for the whole of the work is to get the preference if his price approximates to that sum total for the three parts.

At a meeting of the guardians of the Naas Union, a letter was read from Dr. Tyrrell, Sanitary Medical Officer at Newbridge, drawing attention to his former reports on the state of the River Liffey, opposite Canning-place, Newbridge. The clerk was directed to lay the reports of Mr. Brett relative to same work on the table at the next meeting.

It is reported that the Local Government Board Auditor has surcharged the Town Commissioners of Belturbet, County Cavan, with a sum of £228 expended in sinking a pump, on the ground that the sanitary authority (the board of guardians) were responsible for the water supply of the town.

In view of the forthcoming Sewage Conference, Mr. G. R. Redgrave has been instructed by the council of the Society of Arts to proceed to some of the principal towns in Lancashire and Yorkshire, and to prepare a report upon the dry systems of dealing with sewage, and the various processes now in operation for the manufacture of manures from excreta.

**A SANITARY TREE.**—A plant of the *Eucalyptus globulus*, or Australian blue-gum tree, the sanitary properties of which have been so much discussed of late, is now in bloom in the Botanical Gardens, London. This is the first time the eucalyptus has flowered in England. It would not be amiss if our Corporation imported some supplies of the above species of trees to plant on its town swamps and slob lands.

**OVERCROWDED DWELLINGS.**—In an article on this subject, in the *Medical Press and Circular*, it is observed:—"A commission is now sitting to inquire once more into the terrible state of things, for as usual the 'Artisans' Dwellings Act' cannot be made to go, and the law's delay best suits the collector of rents and the landlord. The Metropolitan Board of Works shirk the responsibility, and local bodies find vested interests too strong for them, while magistrates refuse to uphold the officers of health; and the evil day is for a while staved off, for no other purpose than that pestilence and death may, without let or hindrance, claim their own."

**VALUE OF OUR STREET SWEEPINGS.**—In its remarks anent the proceedings at the City Hall on Saturday, the *Daily Express* has the following:—"Extraordinary statements were made on Saturday before the Local Government Inquiry Commissioners in reference to the mud of the streets of Dublin; that it is only pulverised stone, and therefore, useless as manure; that nobody will buy it, though it is ready to be sold; that nobody will take it, though it is offered to the public for nothing; and that the Corporation depôts have become filled up with it. If it is to be had for nothing it is odd that builders all about Dublin will not take this pulverised stone for foundations, instead of the inferior rubbish they are sometimes charged with using. Is the Corporation, with all the engineering talent at his service, incompetent to carry out a plan of utilizing this admirable material in filling hollows in public thoroughfares? Or does the Corporation intend to go on for ever making more mountains of it?"



## ADVERSARIA HIBERNICA.

## LITERARY AND TECHNICAL.

IRELAND has not been so late in the field as has been generally imagined, in respect to architectural and building literature. While works of a topographical and antiquarian kind have been for the last century and a-half numerous, those of a strictly architectural nature in this country were few. Books or manuals dealing with the constructive principles of architecture, and intended for the use of architects, builders, and workmen in Ireland, have been more rare until a late date. From the middle of the eighteenth century, however, until its close, a few useful works were written by native architects and other men of kindred tastes and studies, and in some of our native periodicals essays on architectural and building subjects have occasionally appeared. It is not our purpose at present to supply a list of these architectural contributions, though we may enter on the subject in detail at an opportune time.

As far back as 1751, John Aheron, a native architect, compiled "A General Treatise on Architecture, in Five Books." The manuscript of this work is in the British Museum, and it was for a long time believed that the treatise was never printed; but the present writer several years since made the fact known that Aheron's work was printed in Dublin in the last century, and that copies, though very rare, are to be found in the libraries of literary men in this city. The MS. of Aheron in the British Museum consists of 176 folio pages, with this epigraph: "This work was written and drawn with pen and ink, and finished the 13th April, A.D. 1751, by John Aheron." Some of the drawings bear a date several years anterior to the completion of the work. The published volume is well illustrated, containing numerous drawings well executed, and in general finish beyond the class of kindred works published at the time. As we gave some detailed particulars of Aheron's printed work in one of our back volumes, we will not here enter into further description.

Passing over works of lesser note on architecture, we may here mention that in 1793 the late Sir Richard Morrison, when a young man, published "Useful and Ornamental Designs in Architecture," &c. This book contained a number of designs for mansions, farm-houses, villas, temples, gateways, &c., with particulars relating to the price of materials and labour at the time; and there was appended to the volume a historical narrative of the rise, progress, and extent of architecture. Morrison was qualified for the task of an instructor in architectural matters, for his father and grandfather before him belonged to the profession; and Sir Richard's son William Vitruvius Morrison, who predeceased his father, excelled even his parent in some branches of architectural knowledge.

In the *Anthologia Hibernica* for February, 1794, there is an interesting essay by William Beauford "On the Theory of Walls for Roofed Buildings." The author deals with his subject in a scientific manner, under several problems, viz.—To find the base of the slope of a wall; to find the breadth of the wall; to find the pressure of the roof against the wall; and to find the thickness of the walls at top for semicircular domes. For those inclined to put his problems or theories into practice he supplies tables showing the thickness of cut stone and brick walls at the top for all the different angular roofs commonly used at the time in this country. The tables are calculated for Gothic pitch and common pitch, with coverings of pantile or slate. Beauford's essay is worthy of notice for more reasons than one. However he may have erred in his antiquarian views, being a disciple of the Ledwich school, still he was a talented writer, possessed of sound practical knowledge and scholarly attainments.

In the "Transactions" of the Royal Irish Academy for 1789 there is an essay by the Rev. Mathew Young (afterwards bishop) on "The Origin and Theory of the Gothic Arch." In this essay the Saxon, Norman, and Gothic

styles are compared, and the five opinions on the origin of Gothic architecture discussed. The part of the essay relating to the theory of the Gothic arch is ably handled. The author, with the aid of illustrations, deals with the relative strength of the arch, compares it with circular and elliptical arches when in a state of perfect equilibrium, and goes on to determine the aberration from a true balance which is generated by the horizontal termination of the solid building erected upon it.

In the "Transactions" of the Royal Irish Academy for the year previous there is an essay by Dr. Young which possesses a value for civil engineers, dealing with the problems of water supply, entitled "An Enquiry into the different modes of demonstration by which the Velocity of Spouting Fluids has been investigated *a priori*." Mr. John Neville, in his "Hydraulic Tables, Co-efficients, and Formulæ for finding the Discharge of Water from Orifices, Notches, Weirs, Pipes, and Rivers," alludes to Dr. Young's paper, and the method by which he determines the value of the co-efficient for an orifice 2-10th inch in diameter with a mean head of 14 in. to be .623. Mr. Neville thinks the manner in which this value is determined by Dr. Young "is very elegant," which is simply by comparing the observed with the theoretical time of the water in the vessel sinking from 16 in. to 12 in.

It will be seen from what we have stated that throughout the latter half of the eighteenth century the higher as well as the more ordinary branches of architectural and engineering art and science received some attention at the hands of Irishmen. During the first half of the present century there have been several works issued bearing upon building subjects, some of them receiving very little notice at the time of their publication. Early in the century one or two builders' price-books were published in this city, and continued to be used by our old builders down to a late date. One of these volumes, if we remember aright, was entitled "Stitt's Measurer," called after the author or compiler, William Stitt. The space of one of our notes is not sufficient for us to enlarge upon the matters under notice, so we shall stop here for the present.

Holinshed, in his "Chronicles," from which we have previously given some odd extracts, furnishes an amusing account of the "Marble City," its churches, and its worthies, lay and clerical. The celebrated Peter White, and his famous Grammar School, is quaintly and amusingly spoken of by the old chronicler. It would be a pity to spoil Holinshed's orthography by putting it into the modern garb, so we will give an extract in its virgin purity. After describing the three churches of the town of Kilkenny—St. Canice's, St. Mary's, and St. Patrick's—the chronicler truly remarking of the former that it was "the cheefe and Cathedral Church, a worthe foundation as well for gorgeous buildings as for notable livings," goes on to say:—"In the west end of the churchyard of late have been founded a Grammar Schoole, by the right honourable Pierce or Peter Butler, erle of Ormonde and Ossorie, and by his wife the Countesse of Ormonde, the Lady Margaret Fitz Gerald, sister to Gerald Fitz Gerald, the earl of Kildare that was. Out of which schoole have sprouted such proper impes through the painfull diligence and the laboursome industrie of a famous lettered man, Peter White (sometime fellowe of Oxford College, in Oxford, and Schoolmaister of Kilkennie), as generallie the whole weale publike in Ireland, and especially the sovtherno parts of that Island are greatlie furthered. This gentleman's method in training up youth was rare and singular, framing the education according to the scholar's veine. If he found him free, he would bridle him, like a wise Isocrates, from his booke; if he perceived him to be dull, he would spur him forward; if he understood he was the worse for beating, he would win

him with rewards; finallie, by interlasing studio with recreation, sorrow with mirth, paine with pleasure, sownernes with sweetness, roughnesse with mildnesse, he had such good successe in schoolinge his pupils, as in good sooth I may boldlie bide by it, that in the realme of Ireland was no grammar schoole so good, in England I am well assured none better. And because it was my happie hap (God and my parents be thanked) to have been one of his crue, I take it to stand with my dutie, sith I may not stretch mino abillitie in requiting his good turnes, yet to manifest my good will in remembering his paines. And certes, I acknowledge myself so much bound and beholding to him and his, as for his sake I reverence the meanest stone cemented in the wals of that famous schoole." Bravo, Holinshed. Peter of old denied his Master, but unlike many of our modern Peters you do not deny Peter, your master, nor yourself, who profited by his teaching.

In Cox's Magazine, particularly in the earlier volumes, there are many sad pictures drawn of the effects of the Act of Union on Irish trade and industries. Some of these pictures were possibly exaggerated, but not a few of them (apart from the language used by Cox and his co-labourers) were true. In the number of the magazine for January, 1811, there is a short article in which American and Irish property and prosperity are compared. Speaking of this city, the writer remarks—"So rapidly is Dublin going to decay, may be seen by inspecting the list of entries in the last week of December, (1810). On Thursday, 27th of December, the imports of the day consisted of 116 hogsheds of whiting, and 1 cask of Malaga wine from Liverpool. On Friday, 1 cask of Malaga wine and 800 bundles of rod iron. On Saturday, 10 packages of painters' colours, 143 yards of floorcloth, and two cases of plated ware. The Custom House is literally useless in commercial affairs. It really is nothing but an hospital, endowed at the expense of industry for the support of 300 idle fellows who should more properly be employed aboard the fleet, or in the house of industry. During the Summer and Autumn it gives employment to nine labourers to pick the grass that grows in front of this gloomy Custom House." Under the heading of "Commercial Report" in the magazine for June 1810, there is another lament written in severe terms, describing the general state of insolvency which was threatening to depopulate the city. The writer complains of "the shameful and open transportation of our provisions"; says we are compelled to be a nation of husbandmen, though capable of being a great commercial one; complains of the low prices of labour, observing that two days' work would not pay for one pound of beef or mutton. Of course the writer had in his mind the low wages paid to agricultural labourers in several districts of Ireland at that time; for although beef and mutton were cheap in those years, still the labouring classes were unable to obtain them on account of the very low wages they received for their day's labour. In the same issue of the magazine of the last-named note there is a paragraph headed "Attornies," in which these unloveable men came in for the following sarcastic whipping:—"This valuable set of men furnish a tolerable quota of their body, as representatives of the different gaols in Dublin; they share part of the common distress, as they very carefully contributed to it. In the Four Courts Marshalsea, there are 39; in Newgate, 3; and in the Sheriff Prison, 29. It is devoutly to be wished the numbers may treble in a few days." Again Cox says in his volume for 1811, that in the year beginning January, 1810, no more than thirty houses were built in Dublin, while by the official report of New York 643 were built in that city during the same time. It is also stated that in 1798 there were 2,661 regular journeymen carpenters belonging to what was called the regular trades body, in-



dependent of 1,000 more not deemed rogular by the others. In the year 1810 the journey-men carpenters are stated to have numbered only 221. If this statement could be proved it would indeed show an alarming reduction, and fully prove that in the lapse of ten years after the Union, the building trade was in a miserable position in this city. H.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

BEFORE passing on to describe the theatrical events succeeding Sheridan's retirement, and those leading to his recall in connection with Smock-alley, we will furnish a few particulars of the lives and dramatic writings of some native and other actors and authors as yet only incidentally alluded to, but who are entitled to notice from their relations with the Dublin Stage.

The name of Francis Gentleman has been already mentioned as an actor and an author of some note, and as the schoolfellow of Henry Mossop, through whom the latter was introduced to the notice of Sheridan, when rejected by Garrick and Rich. Gentleman's theatrical life was, like many other of his brethren, full of vicissitudes. He was born in this country in 1723, and received his education in this city. As early as the age of fifteen he obtained a commission in the same regiment with his father, but, making an exchange to a newly-raised company, was dismissed the service by his regiment, which was reduced at the conclusion of the war in 1748. Having some theatrical talent, and an inclination for the stage, he shortly made his appearance on the Dublin boards, in the character of Aboan in the play of "Oronooko." At this time Gentleman had some little property, and was not dependent on his acting; but, hearing that a legacy was left him, he proceeded to London, where he soon made away with whatever little fortune he possessed. He is next found performing at the theatre in Bath, and subsequently at Edinburgh, and later again he belonged to several companies of actors at Manchester, Liverpool, Chester, and sundry other places. Soon he grows tired for awhile of his wandering life, and settles down at Malton, in Yorkshire, where he marries, having some expectations of being provided for by the Marquis of Granby, to whom he had been recommended by a gentleman who had known the actor's father. Hopeful, he removes to London, but only to find his prospects blasted by the death of his patron. In 1770 we find Gentleman performing at the Haymarket, under the management of Foote, where he continued for three seasons. At the end of his engagement here, Gentleman is forced to again take to strolling companies, and to experience many disappointments. Gentleman wrote many pieces for the stage, several of which were published, and the most of them several years subsequent to the date of which we have been treating in our notes. Among his published pieces are: "Sejanus," 1751; "The Stratford Jubilee," 1769; "The Sultan: or Love and Fame," 1770; "The Tobacco-nist," 1771; "Cupid's Revenge," 1772; "The Pantheonites," 1773; "The Modish Wife," 1774. Before the close of his career, Gentleman was convinced that to possess an independent spirit in his day was not conducive to worldly profit. As an actor, he was not a representative one, although he could act many parts with a fair success. As a play writer and a writer in other fields, his pen appears to have been busy for several years, but it failed to bring him a competence. Towards the close of his career we find him lamenting his fate in the following bitter expressions, which no doubt were true: "I heartily wish I had been fated to use an awl and an end sooner than a pen, for nothing but a pensioned defender of Government, a sycophant to managers, or a slave to book-sellers can do anything more than crawl." Gentleman is said to have been the editor of

the edition of "Shakespeare" printed by Bell towards the close of the last century, by some critics accounted the worst edition that ever appeared of any English author. We do not know the exact date of the death of Francis Gentleman. He is an instance of an actor and dramatic author of no mean abilities, commencing life under very favourable auspices—a life full of promise and foreshadowing brilliancy, but ending under cloudy skies.

The name of John Cunningham is better known as a poet than a dramatic author or performer. He was born in Dublin in 1729, and was the son of Scotch parents and brother to P. Cunningham, the sculptor, some of whose works in this city are still to be seen. John was the younger son, and before he was twelve years old evidenced his poetic faculty by producing several pieces. He wrote a dramatic piece at the age of seventeen, entitled "Love in a Mist." This little play obtained for the author free entry into the Dublin theatre at the time, and was probably the means of unsettling his mind, and turning it towards the stage. He betrayed an anxious desire to appear upon the stage, although his small stature was totally against him either for tragedy or comedy; but, writes one of his critics, "in the *petit maitre* cast, however, he was tolerable, and if he in anything rose to excellence it was in his favourite walk, the mock French character." Unable to conquer his passion for the stage, young Cunningham left Dublin hurriedly without acquainting his friends or family, and on landing in England commenced the life of an itinerant player. His hopes were not realised, and, becoming sensible of his mistake, yet he hesitated to return to his parents. His father had been a well-to-do wine merchant in this city, but before the young actor could summon sufficient resolution to overcome his pride and return home, he received intelligence that his father had become insolvent. He had still a home in the house of his brother, the sculptor, who repeatedly urged him to return to Dublin, but the feeling of dependence was repugnant to the young actor. He elected not to return but to east his lot with the profession he first selected from choice, and which now became a necessity with him. Young Cunningham continued to act in several places, and to experience the usual vicissitudes of strolling players for several years, particularly in the north of England. In 1761 he acted at Edinburgh under Mr. Love, and in that city he wrote a few of his best poetical pieces. Anxious to better his position, and by the advice of friends, Cunningham left Edinburgh for London. He here met disappointment upon the threshold, as the bookseller who was to employ him stopped payment. There was nothing to be had for the poet unless he was willing to mix himself up in political wrangles, and prostitute his talents in the domain of intrigues and scandals. After a short stay in London, Cunningham returned once more to the northern capital. About this time Digges was manager of the Edinburgh theatre, in whom the poet met a friend. He continued with Digges until the latter left Scotland, and then Cunningham proceeded to Newcastle-upon-Tyne, a place which he had made his residence for several years, and which he had originally left with regret. Cunningham had wont to call Newcastle his home, and always desired, it is said, to breathe his last breath there, in consequence of the friendship he experienced in it, and the associations by which he was surrounded. In Newcastle and the neighbouring towns Cunningham continued to earn a small but sufficient subsistence. He was fond of retirement, and happy in the circle of his rural friends, and he would not be tempted to seek his fortune again in the big metropolis. His wish was gratified, for he died among his hospitable Northumbrian friends on the Tyneside, in September, 1773, of a lingering illness, produced by some long-rooted nervous disorder. Cunningham's grave is in St. John's churchyard, Newcastle-upon-Tyne.

Henry Jones was a native of this country,

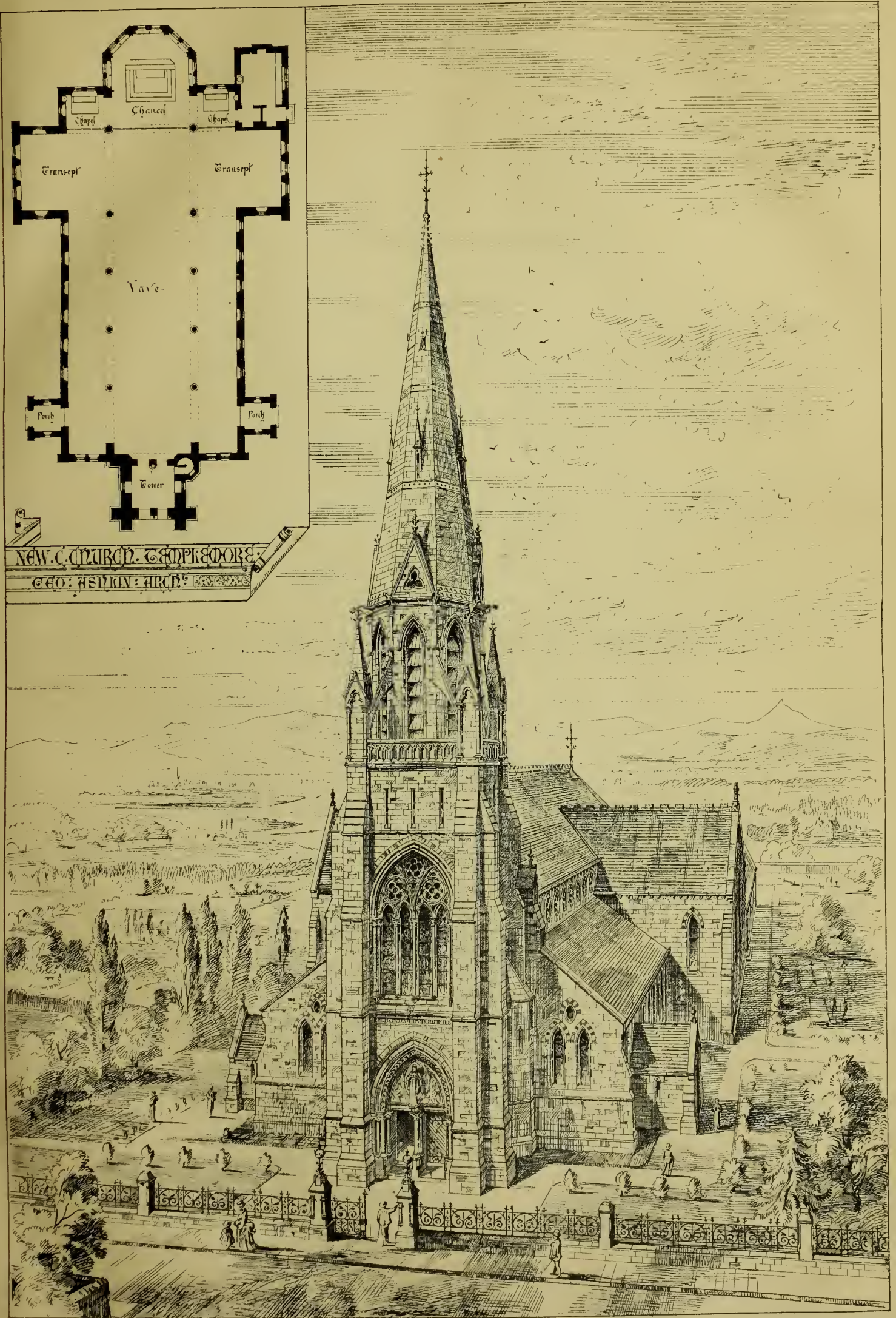
having been born in Drogheda. He was the author of one play, the "Earl of Essex," which had a successful run for some years in the last century. Jones was originally a bricklayer by trade, but his poetical talents secured him the notice of friends, and those patrons brought our humble poet under the notice of the Earl of Chesterfield, when Viceroy of Ireland in 1745. His Excellency claimed after some time to have discovered the mechanical prodigy, took him under his wings, increased the poet's patrons, and when leaving this country brought the bricklayer bard and dramatist with him to England. Jones's poems were collected, his lordship aiding in procuring subscribers, and it is said undertaking the editing and correcting of his tragedy. By his lordship Jones was also introduced to Colley Cibber, and matters seemed to promise well for the future of the bricklayer dramatist. On the first production on the stage of Jones's "Earl of Essex," the play ran for twelve nights; but instead of this being a spur for further exertion, it seemed to have acted otherwise. Jones was not always the best tempered of mortals, and his sudden and early temporary success fed his vanity, and induced him to rest too long upon his oars. His patrons may have expected a continuance of the panegyrics they received, and most likely the poet considered he had dealt enough in eulogy already. Economy was not a virtue with our poet, and he wasted his early profits, and as time rolled on, his friends and patrons were found wanting. Patrons in Jones's day expected praise, and too often have the patronized had to sacrifice their independence or starve. However, Jones brought his misfortunes upon himself, for, had he availed himself of his facilities, he might have died possessed of a tolerable competency. After experiencing many trials, Jones died in great want, in a garret of the Bedford Coffee-house, London, in 1770, where some time previously he had been dependent upon the charity of the owner. At his death he left an unfinished play called the "Cavo of Idra," which Dr. Paul Hiffennan, an Irish writer, dramatic author, and noted character of the last century, afterwards completed and brought out in five acts, under the title of "The Heroine of the Cave." The tragedy of the "Earl of Essex" appeared in 1753, and was acted several times on the Dublin boards.

Pendant to the above short sketch, a few particulars of the life of Paul Hiffennan may be in the right place here, although the close of his career, like that of other dramatic writers we have noticed, comes down to a period by several years later than the date we intend to reach in our "Notes on the Irish Stage," in their present shape. Many strange incidents, bad, good, and indifferent, will be found connected with the life and doings of Paul Hiffennan, in the Dublin magazines and newspapers of the last century, and later in the London magazines. Paul Hiffennan was born in Dublin, by some accounts in 1719, received part of his education in Trinity College, and pursued the remainder of his studies in France. He for some time followed his profession in Dublin; but not having met with much success in the medical line, resorted to his pen for a living. While in this city he wrote on a political paper in fierce opposition to the famous Dr. Lucas. He left here for London in 1759, and commenced writing for the stage and for the booksellers, doing a large amount of hack work in various ways, in compiling, book-making, and translations. Hiffennan had very few scruples, and consequently was to some extent an unprincipled writer, and occasionally disgraced the guild of literature.

Among a certain class of boon companions, he was of course, looked upon as a "good fellow;" but before the close of his career he lived very nearly altogether upon the generosity of his friends. The reckless and somewhat eccentric Hiffennan closed his life pressed down by poverty and disease, in London, in the year 1778. His dramatic works, published between 1759 and 1774, were—"The Lady's Choice," "The Wishes

\* See ante.







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of a Free People," "The New Hippocrates," "The Earl of Warwick," and "The Philosophic Whim, or Astronomy." The unfortunate Hiffernan had very little success as an author, and will be probably longer remembered for his wild dreams than for his contributions to the dramatic literature of his day.

## LECTURES ON ARCHITECTURE.\*

(Continued from page 113.)

BEFORE proceeding to point out to you any remains of Norman dwellings, it may be well to devote a short time to point out to those of you who are not architects some of the characteristic details of the architecture of the period. In so doing, it is not necessary to confine ourselves to secular examples, for the features which illustrate the style were, as a matter of course, common to all buildings erected at the time. The distinction between the architecture used for ecclesiastical, and that employed for domestic purposes, is altogether modern. In Mediæval times, the workmen knew but one style of design, and used it for all purposes. The building to be erected might be a palace, or a barn; a church, a castle, or a dwelling-house. It might be plain or decorated: dignified or severe; but the style was the same. As a consequence, we are able to recognise the work of the time, by almost any relics that are left to us.

We have seen that the Normans followed the traditions of simplicity left to them by the Saxons. Their works were, at first, indeed, undecorated, even to baldness; but they added gradually an amount of decoration which renders their architecture (as, for example, various Norman doorways) often ornamental in the highest degree. The mouldings were at first few, simple, and such as could be easily worked. The columns were of great size when they were used to support arches, although the attached shafts to doorways, windows, and arcades were of moderate dimensions. The arches were semicircular, of plain mouldings, or even with members plain on plan, with square angles. The doorways were often deeply recessed, and very effective, with attached shafts, and bold mouldings, sometimes highly enriched. In the ornaments of the latter, the Romanesque influence may be clearly traced.

The same remark applies to the arrangement of the windows when anything more ambitious than a single light was attempted. In such cases, the mullion and tracery of future days were pre-figured by the arrangement of a double arch springing from a central shaft, with capital and base of its own, just as we see it in the Romanesque and Gothic architecture of Italy. In the latter, the columns are frequently twisted, and sometimes decorated with shallow flutings. The same method of ornamentation is found in Norman work, in which the large columns often have their surface ornamented with flutings of a similar character, in zigzag or spiral lines. The zigzag ornaments of various kinds in which the Norman architects delighted, may also be traced to a similar source. These zigzag enrichments are often of great beauty, and sometimes of great complexity, being so arranged as to interlace with one another in a very complicated manner, as may be seen, for example, in the archway on College-green, at Bristol.

The large columns, from being circular or polygonal on plan, became gradually clustered, with more or less elaboration, thus paving the way for one of the most graceful features of the succeeding styles of Gothic art. There is, I think, a special beauty, however, in the plain circular columns of early days. It is essential in a column that it should not only be adequate in fact, but also obviously sufficient for the due performance of its duty, which is to support a weight. This office was well discharged by the plain and sturdy Norman columns, and it may be

doubted if the refinements of later days, with their clusters of numerous vertical shafts, sometimes with carved mouldings between them, did not involve some compromise of principle.

The early Norman arches were semicircular, sometimes a little stilted, but never pointed, except when they intersected, and until the transition to Early English had begun. They were of moderate dimensions, and resting, as they did, on massive walls and pillars, were not calculated to exercise that destructive thrust upon the building which so often deranged the plans of succeeding architects.

Norman buildings have, however, suffered from defective construction of the apparently solid walls, which are often built of rubble, and only cased with stone. In some cases also, as at Peterborough Cathedral, the abutments have been insufficient, and the thrust of the arches has proved too great for portions of the walls. In the case of abutments, the science of building was not far advanced, and the Norman architects relied little on buttresses, which were broad, and of small projection, often resembling pilasters rather than buttresses, and here recalling once more the Italian type of work. The boldly-projecting buttress, with its wealth of decorative construction of arch and pinnacle, was not as yet introduced, but turrets were not unusual, and they terminated frequently with high pyramidal roofs, thus indicating the development of the spire in the future.

Vaulted roofs were only occasionally employed, but at Canterbury we have a good specimen of a late Norman groining, carried out by a Frenchman, William of Sens, who was, of course, well acquainted with the more frequent arched roofs of his own country. A beautiful feature in Norman buildings was introduced by the construction of arcades, sometimes complete, but often applied to the walls, so as to form a surface decoration. We have a good example of the perfect arcade in the staircase at Canterbury, to which reference has already been made, and numerous instances exist of the wall arcades, which sometimes served also as shallow niches. Corbel courses, with intersecting arches, are often to be met with, and are once more a feature in common with Romanesque work.

As the style advanced, the decorations increased, and gave richness of effect to the portions of the building in which they were used. This richness was enhanced by the contrast with the simplicity and general plainness which still characterised the great masses of the structures built by the Normans. The large plain spaces of the walls were enriched by surface decoration, consisting of diapers and interlaced patterns of much beauty, and round panels or bosses were employed, to add a further ornament in the jambs of recesses and the soffits of arches. The earliest designs of rough zig-zags, with diagonal and rectangular ornaments, were such as could be executed by masons with little skill, and by the use of the axe. The later work would tax the chisel of the advanced workman. The columns had capitals of a peculiar character, with a square abacus. The section of this member was almost uniform, and is composed of a large hollow, with a broad fillet above it. Between the fillet and the hollow there is often a little sunk channel, which is a common sign of Norman work, and gives to this apparently very simple moulding a certain piquancy of effect. The rough and early ornament was generally shallow, but afterwards we find details more elaborate, and carved with great effect of deep undercutting. You are, doubtless, familiar with the ordinary type of Norman capitals, which has been called scolloped, from its resemblance to a scolloped shell; but this is only one form of those commonly used. In others, we find, again traces of the origin of the style in the obvious imitation, in a manner more or less skilful, according to circumstances, of the volute in the Ionic, and succeeding styles of Classical architecture. This feature is very clearly seen in the very beautiful capitals in the choir of Canterbury Cathedral, and here

may be found a further reminiscence of the Roman capital, in the cutting off of the angles of the abacus. These capitals are, however, of so late a style as to be properly called Transitional, rather than Norman. They are among the richest examples of this important feature, and contrast greatly with the earliest and simplest form, known as the cushion capital, which is developed from a square block, by cutting and rounding off its lower corners.

The base mouldings were plain and severe. Sometimes an imitation of the Tuscan and Attic bases of Norman times is evident. They are usually placed on a plinth, or sub-base, which serves a constructional use, and adds to the apparent solidity of the columns or piers. The latter often supported wooden roofs, for Norman vaults and groinings are not found until the style was far advanced. The barrel vault was naturally the first form used. It came naturally from the employment of the arch in windows and doorways, which, with their deep recesses, are, in fact, specimens themselves of barrel vaulting. The addition of flat-arched ribs soon followed, and then a plain mode of groining without ribs. Ultimately the latter feature was introduced, and from diagonal ribs the step was not long or difficult to the employment of the pointed arch.

Arched vaults, however, of great span are not found in early Norman work, and where the width was considerable, a wooden roof and ceiling were employed, as at Peterborough Cathedral. Such ceilings were intended to be painted, and at Peterborough we see the original design carefully restored. However interesting such decoration may be in an archaeological sense, it must be confessed that it is very inferior to even the simplest form of vaulting, and it appears to be especially unsatisfactory when considered with reference to the plainness of the work below, the massive piers and arches of which would seem to be justified only by the necessity for supporting a roof equally solid in character.

In the later examples of Norman architecture, the intersecting arcades of which I have before spoken, became common. The two semicircles cutting each other produced an acutely-pointed arch. The ribs of the vaults developed a similar form, and the pointed arch, with its almost boundless facilities for elaboration, became an accepted fact in English Mediæval architecture. The carver's chisel was freely used, and sculptured decorations became frequent. Round and pointed arches were found in the same building; the tooth ornament made its appearance, and everything was ripe for a new transition. We will, therefore, leave at this point the description of the peculiarities of Norman work. I hope it has been sufficient to enable you to apply it in practice, so as to distinguish Norman details from those of later times, further allusion to which I will defer till a future occasion.

For examples of the various details which I have endeavoured to explain to you, I have referred, in some instances, to ecclesiastical buildings, as being the most important and best preserved specimens of the style which are left to us. They apply, however, to all buildings of the period, to a greater or less degree. In those of the Saxon era, erected before the Conquest, we find also some marked peculiarities, which may be now further mentioned. One of them relates to the manner of constructing masonry at the angles of the buildings, by the introduction of long and short stones alternately, the walls themselves being constructed of small stones roughly shaped. This has been called "long and short work," and is not to be recommended as good masonry. It is, indeed, so much at variance with the tradition of the craft that some archaeologists have supposed that it was introduced by men familiar with the plane, rather than the mallet and chisel; and as the Saxons were, as we know, well accustomed to wooden construction, this long and short masonry has been stigmatised as "carpenters' work."

\* By Professor Barry. Second lecture. Delivered at the Royal Academy on Monday March 5th.



Another peculiarity is found in the baluster-like form of shaft introduced in windows and arcades. There is a good specimen of this feature in the tower window at Earl's Barton, in Northamptonshire. The shaft is here obviously taken from a baluster, probably of Roman origin, and would also be more appropriate for a wooden construction than for a building of stone.

The changes which the Conquest introduced brought about the Norman style of building, and the circumstance that the change was complete, though gradual, seems to show that everything was ripe for such a consummation, and that the so-called Saxon architecture had served its day. We know that our forefathers had little of that respect for antiquity which most of us at least profess to feel. Although recognising precedent, they were fully persuaded that they were advancing and gradually improving upon the forms of the past; they had, therefore, no scruple in destroying the latter to make way for newer constructions of their own. Thanks to greatness of scale and to solidity of work, we possess numerous remains of Norman buildings, for they have not proved easy to be pulled down, and are too large in their parts to be easily adapted to the lighter and more elaborate architecture of succeeding times. At Winchester, a not very successful attempt was made to ease the Norman piers with moulded stonework of a later date. The effect was heavy, and not such as to encourage similar operations. The work, however, is interesting as showing the daring spirit of those days in matters architectural.

We have at Lincoln some considerable remains of domestic work in the buildings known as St. Mary's Guild, or John o'Gaunt's Stables, and the Jew's House. Both of these buildings are interesting, and deserve some explanation. The former is the more extensive, but is modernised by the addition of a later roof. It possesses a handsome cornice, and has the flat pilaster-like buttresses, typical of Norman work. The entrance doorway is decorated with ornaments of the later or Transitional period, and the windows are partly Norman, and partly Early English, in their details. There is a doorway of the square-headed trefoil form, and the windows are coupled together with a shaft between them. The bricks are of the thin tile-like description, which were used by the Romans. A fireplace, with a chimney, exists in the upper story. The back of it is formed of thin bricks, placed edgewise. The whole presents to us a valuable example of Norman domestic work.

Lincoln is rich in such remains, the most perfect of which is that already referred to as the Jew's House. It is small, and has but two rooms, though others may have originally existed. The chief interest it possesses arises from the richness and characteristic design of the external ornamentation. We find in the latter many of the details which I have already pointed out to you, as illustrating the style of the time. There is first, the deeply-recessed doorway, with its shaft, and double zig-zag archivolt. The archway over the door is made use of in a curious manner to support the fireplace and chimney belonging to the upper story. The chimney itself has been modernised. The name of the Jew's House may possibly be a misnomer, but if not, it is remarkable as being indicative of the position of the Jewish people in England at this time. It is curious, therefore, that by tradition it should be ascribed to a member of the Jewish race, too often despised and ill-treated. They were, however, as we know, powerful at this period, as they have ever been, by the possession of wealth, although not daring to display the same too openly. The cruel manner in which King John dealt with a Jew capitalist, by extracting his teeth until he yielded to extortion, has often been referred to.

If the house we are now discussing was in reality the dwelling of a member of the same ancient race, we may be sure he must have been a personage of wealth and importance,

for such houses were very rare in the twelfth century, and the decorative character of its architecture marks it out as an exceptional instance. The windows deserve attention, particularly the two-light window, with its double order of mouldings. We find here the characteristic shaft as a mullion, and the upper part of each light is made square, as is frequently the case with Norman openings. The small window with a trefoil head, and a pointed arched dripstone or label, is no doubt a later addition, and the lower part of the elevation is altogether modernised. The principal chamber was evidently on the first floor.

The peculiar treatment of the arched doorway, and chimney supported by it, is found in another house, near to the Jew's House, so that it was probably a favourite expedient in the locality. We see by this interesting monument, first, how easily, and yet how faithfully, the Normans applied to domestic work the details with which we are familiar in their sacred buildings. We notice, secondly, that we are approaching the period when men began to display some care for architectural beauty in their dwellings. We have left behind us the plain wooden huts of the Saxons, and are presented with a style of solid construction and decorated masonry.

It must not, however, be supposed that such houses were common, for up to the time of Stephen, and even later, the domestic buildings of our towns were constructed of wood, and in London we know, from the destructive effects of the Great Fire, as late as the reign of Charles II., that the wooden mode of building still existed, even at that comparatively recent date. The municipal authorities, however, did their best to encourage the citizens to build in a more durable way, and as a precaution against the spread of fire, to use stone instead of wood.

In the days of Richard I., certain definite regulations were laid down in this respect, and were contained in a document known as the "Assize" of 1189, and published in Mr. Parker's work. In order to facilitate the change from wood to stone, we find various privileges accorded to the improvers, one of which savours of confiscation, for it provides,—"If any one would build of stone, and his neighbour, through poverty cannot, or perchance will not, then he shall yield unto him desiring to build 3 ft. of his land, and the other shall make a wall upon that land, at his own cost 3 ft. thick and 16 ft. in height." Party walls have been enormously increased in height since this regulation was made, and it would have been well for the solidity and comfort of our houses if they had not, at the same time, decreased in thickness.

The regulations of the "Assize" refer in great detail to the erection of party walls, but they say little about the fronts of the houses towards the streets. The materials for such fronts, therefore, continued to be chiefly of wood, as being cheaper than stone, and more convenient in reference to the prevailing habit of gaining space in the upper stories, by projecting stories over the ground floor shops or rooms. In spite of all regulations improvement was slow, and destructive fires frequently occurred. In London there was a serious outbreak in the reign of King Stephen, and another in the reign of King John, in the year 1212. After the latter event the rules, which may be described as the origin of our Building Acts, were revised and strengthened. One of the new rules runs thus:—"Whosoever wishes to build, let him take care, as he loveth himself and his goods, that he roof not with reed, nor rush, nor with any manner of litter, but with tile only, or shingle, or boards; or, if it may be, with lead."

All wooden houses which imperilled their neighbours, by causing danger by fire, were to be pulled down by the aldermen and their assistants, and before every house there was to be a tub, either of wood or stone, kept constantly full of water. The removal of dangerous houses was not evidently thought a difficult task, for every alderman was to be provided, under pain of a fine, with "a

proper hook and cord," and with these simple implements the houses, or hovels, were to be pulled down, in a summary manner on their condemnation.

The wages of the different classes of building workmen were fixed, and orders were issued to coat with plaster, or a kind of concrete, the roofs previously covered with reeds or rushes. Special directions were given as regarded the cook-shops, which were the eating-houses or inns of the period. Mean sheds had arisen round these cook-shops, and as they were considered dangerous, they were marked for their destruction, "so that there may remain only the house (or large hall) and bed-room." Some of the cook-shops or inns acquired considerable importance, and with lodgings for students and others which gathered around them, became centres of resort for those who followed similar pursuits, as, for example, the inns of court, where the lawyers congregated. Flues were apparently forbidden in party walls, and the cooking-stove was commonly placed in the middle of the kitchen, with an opening in the roof above for the smoke. Regularly constructed chimneys were not, however, unknown, as we have seen in the case of the Jew's House at Lincoln, and they may have been constructed in the front and back walls, and in some cases, carried up in the gables. The "Assize" contains further provisions for sanitary contrivances, which indicate an increasing attention to domestic comfort, and mark a distinct advance upon the ruder customs of the Saxons.

We have now sketched, though imperfectly, the arrangement of the houses of the twelfth century. The remains of them are, as I have said, necessarily scanty, but enough can be found to indicate with tolerable clearness the general plan on which the Normans worked. These did not in all probability vary much in the various parts of the country, except from accidental circumstances, such as the prevalence of particular building materials in different districts. The architectural details, as has been seen, followed much the same rules that were observed in the more important ecclesiastical buildings. Painting and gilding were employed for decoration, particularly in the capitals of columns; and some approach to external contrast of colour was often obtained by the use of flint and stone, and contrasted materials of various kinds. The hall was often spacious, and treated in a handsome architectural manner, whether with or without pillars. A gradual advance was being made, at the same time, towards domestic comfort and privacy, and rules were found necessary to restrain the caprices of individuals in our large cities. We find everywhere that willingness to improve on the past, without wholly breaking with it, which, if common with our ancestors of the twelfth century, is certainly not unknown to the Englishman of the nineteenth.

(To be continued.)

## HEALTH AND SEWAGE OF TOWNS.

THE annual conference of the Society of Arts on Health and Sewage of Towns will be held on Thursday and Friday next, the Right Hon. James Stansfeld, M.P., late President of the Local Government Board, in the chair. The conference will meet each day at 11 a.m., and will sit till 1.30, then adjourn till 2; sit again till 5 p.m., and, if necessary, meet again at 8 p.m. There will be papers and discussions on—1. Dry Systems; 2. Water-carried Sewage; 3. Escape of Sewage Gas into Dwellings; 4. Discharge of Sewage into Sea; 5. Additional Facts to those stated in the Report of the Local Government Board on Disposal of Sewage. The object of the conference is to discuss existing information in connection with the results of the systems already adopted in various localities; to elicit further information thereon; and to gather and publish, for the benefit of the public generally, the experience gained. The introduction and discussion of untried schemes



will, therefore, not be permitted. Special papers, which have been prepared at the request of the council, will be printed and circulated at the conference. An exhibition of sanitary appliances will be held during the conference.

#### NEW CATHOLIC CHURCH, TEMPLEMORE.

We give with this number an exterior view of a new R. C. Church about to be erected at Templemore, County Tipperary, from the designs of Mr. G. C. Ashlin. The material to be used will be the local limestone, with dressings of same. The face will consist of broken coursed pitch faced ashlar. The columns of nave and transepts will be of polished red Aberdeen granite in one stone each. Caen stone will be used for internal dressings.

#### BORING THE EARTH WITH A DIAMOND CROWN.

Messrs. Meux and Co., brewers, like all great brewers, consume water in amazing quantities, and are consequently very large customers of the London water companies. Now, it is the opinion of some practical geologists that this enterprising firm have really no need to pay for water at all—they being—as proprietors of ground situated in London—already in possession of no one say how many times more than sufficient for all the beer they brew, or are ever likely to brew, and they are therefore carrying out a deep boring in search of it. All that Messrs. Meux and Co. have obtained for an expenditure on deep boring, which will not be less than eight thousand pounds, is a well-founded hope of winning very shortly the prize they are seeking. The sinkers of the old well, which used to be a valuable servant of the brewery, but has of late years ceased to yield, found that the stiff blue and brown clays and the clayey gravels peculiar to the London basin came to an end at the depth of 150 ft., where the soft white upper chalk begins. The total depth of the old well was 265 ft., exclusive of the bore-hole, by which an attempt had been made to improve it. From 490 ft. to 812 ft. the new work lay through the hard grey lower chalk and marl. At 812 ft. the upper green sand was reached; at 840 ft. the hard slate-colored clay, known as gault, was found; at 999 ft. are limestone and pebbly beds; and, finally, at 1,004 ft. the “crown” of the descending bore came upon the long-hoped-for lower green sand. Descending into the deep vault or cavern in which these operations are conducted, among bars, tubes, girders, rods, wheels, bands, chains, and ropes almost as intricate as the spars and rigging of a first-rate Indianman, we found the work of boring which has been almost incessantly going on since the beginning of December last still in full play. The whirl of bands, the movement of the engine, and the complication of beams and cross-beams and other strange appliances far overhead, render the aspect of this twilight region somewhat bewildering to a stranger who has just been walking in the sun out of doors. By degrees, however, it is perceived that all this maze of detail has for its object the simple process of turning a hollow boring rod of 13½ in. in diameter, so that its head, technically known as the “crown,” may steadily continue to cut its way deeper and deeper into the earth. The engine is capable of turning this rod at the rate of 280 revolutions a minute, but under present conditions only 80 or 90 revolutions are practicable, which, continued on an average twelve hours a day, adds 14 or 15 ft. daily to the depth when there are no mishaps. The head or cutting part of the crown is not, as might be supposed, a sharp edge, but a flat rim of some half inch in breadth. The twelve diamonds which are embedded at intervals in this rim constitute the cutting power. Nearly all the work has hitherto been through hard

sandstone and limestone; and even in the softer chalk huge flints have occasionally obstructed the way. But the diamonds cut easily through the hardest substance, and there is so little wear even of the iron that one “crown” alone has, without repairing, accomplished 400 ft. of the work.

#### THE “DEAN O'CONNELL” MEMORIAL.

THE committee entrusted with the carrying out of the proposed memorial to the late Very Rev. Dean O'Connell say in their report, presented to a meeting of the parishioners of Irishtown and Donnybrook on Sunday last:—“Your committee, in order to carry out the objects for which they were appointed, have held frequent meetings, and used every exertion to further the intended memorial to Very Rev. Dean O'Connell, and they are glad to say that the response to their call has been very gratifying. Substantial assistance has been received from quarters so widely asunder as to show forcibly the great and general esteem in which our late pastor was held. The committee, in considering as requested how to provide a suitable position for the proposed memorial altar, came to the conclusion that to effect that object the present church should be enlarged. This conclusion, indeed, was pressed upon them, not only by the necessity of providing a place for the new altar, but if possible still more by the fact that the accommodation in the church is no longer sufficient for the increasing congregation who frequent it. It is recommended to throw down the wall behind the present altar, and to extend the church on that side by the erection of an apse. This apse will contain the new altar, and afford room for its surroundings, and the entire church as it at present stands will thus become available for the accommodation of the people. Mr. Charles Geoghegan, architect, has prepared plans of the proposed extension, which we now lay before the parishioners and subscribers for their consideration. The cost of the altar and the apse will be in all about £1,500. It will be seen that about £1,000 thus remains to be provided, should the improvement recommended be resolved on.

#### NOTES OF WORKS.

Alterations and additions are to be made to the Roman Catholic Church, Barndarrig, county Wicklow. Mr. Haguc, architect.

The trustees of the Kilmorey estate require tenders for the erection of parsonage, together with office buildings, at Newry. Mr. William James Watson, architect.

The time for sending in tenders for the Liffey bridges will expire on the 22nd inst. Mr. B. B. Stoney, engineer, Port and Docks Board.

Messrs. Anthony Keogh and Sons, Galway, have been declared contractors for the sheds of the Royal Agricultural Society Show, to be held at Galway, August, 1877.

A meeting has been held to take steps for carrying into effect several much-needed changes and improvements in Sandford Church, County Dublin. The present complaints made are said to be: “that there is a difficulty in kneeling; that it is difficult for a portion of the congregation to see the clergyman; that the light is extremely defective, particularly under the gallery; the ventilation is so imperfect as to be dangerous to health; and the choir is placed in a most inconvenient position.” Is not a new church needed?

From Coleraine we learn that sundry building improvements are being carried out. Messrs. Bellas and Son have just completed their new sawing and moulding mills. The extension of the markets is being pushed on with speed by the contractor, Mr. Robert Maxwell, and many other works of minor character are being proceeded with in this thriving northern town.

An adjourned meeting of the members of the Select Vestry of St. David's Church, Naas, was held on Tuesday last, to consider the design submitted for a memorial window in the church to the late Earl of Mayo, the alteration in the pews, and to receive the report of the Cemetery Committee. The Rev. Maurice T. de Burgh, vicar, occupied the chair. A committee, consisting of Dr. Hayes, R. H. Tracy, and E. Molloy, was appointed to carry out some necessary repairs to the church gate, piers, the bell, and the sexton's house. The design, as submitted by Mr. Drew, for the stonework of the memorial window to the late Earl of Mayo was approved of. Upon the proposition of Mr. Tracy, seconded by Mr. Molloy, it was resolved—“That a plan or plans of tracery windows, omitting figures, be got and submitted to the Select Vestry before any one is adopted.” The report of the Cemetery Committee was read and approved of. The report stated that the vicar gave over to the parish any rights he had to fees for interments in Maudlins Cemetery. The committee recommended the retaining of the former fees for interments, &c., to enable the Select Vestry to keep the graveyard in proper order, and that a house for a caretaker be built close by, which should be given rent free to the person appointed grave-digger. The recommendation of the committee was adopted.

#### LAW.

##### A LIGHT AND AIR CASE.

VICE-CHANCELLOR'S COURT.

*Sir James W. Mackey v. The Scottish Widows Insurance Company.*—In this case plaintiff, who is a seed merchant in Westmoreland-street, sought damages for deprivation of light and air, caused by the new building of defendants in College-street. They had offered plaintiff £1,500, but he demanded £5,000! After several days' hearing, the Vice-Chancellor delivered judgment, and in doing so, he described the position of the premises at the residence of Sir James Mackey's establishment, and the change that had been occasioned by the defendants' building. On the point as to the deprivation of air he thought plaintiff had altogether failed. The particular cases of complaint alleged as to deprivation of light were—first, that there was not light enough to use this room as a seed store, a purpose for which it had been devoted for the last fifteen years, as the labels on the bags of seeds and the numbers on the drawers could not be read; secondly, that the process of examining and sifting seeds could not be safely or properly carried on in the room; and thirdly, that the room had been deprived of a direct amount of sunlight that it previously enjoyed during portions of the day. His lordship then went through the evidence, observing that he attached much special value to the evidence of Mr. Howard Grubb. He was of opinion that the evidence of the plaintiff had failed to support these allegations, and that plaintiff had not satisfactorily proved that there had been that material and substantial deprivation of light formerly enjoyed by him, which was necessary to entitle him to the injunction he sought. The bill would, therefore, be dismissed with costs.

##### “UNEMPLOYED BENEFIT MONEY.”

COURT OF QUEEN'S BENCH.

(Before the Lord Chief Justice, Mr. Justice Fitzgerald, Mr. Justice Barry, and Mr. Justice O'Brien.)

*Todd v. Carmichael.*—In this case Mr. M'Hugh applied to the full Court, on the part of William John Carmichael, for a conditional order for *certiorari*, to bring up a decree pronounced by Mr. O'Donnell, resident magistrate, Belfast, for the purpose of having it quashed. Counsel stated that Mr. Carmichael is a trustee of the Belfast Branch of the Amalgamated Society of Carpenters and Joiners, whose head quarters are in Manchester, and with branches in every quarter of the globe. The plaintiff, Thomas Todd, was, it would appear, entitled to 11s. “unemployed benefit,” but he having refused to comply with a rule of the society which required his signature in a book, payment was withheld. Upon the hearing of the summons in reference to the matter, Mr. O'Donnell made an order for the 11s., together with a sum of 20s. as costs. Counsel stated that he intended to argue that, under the Trades Union Act, it was not within the jurisdiction of the magistrate to make an order enforcing payment of “benefit money.” The Court granted a conditional order.



## STREET TRAMWAYS.\*

PORTLAND cement concrete formed the best foundation for a tramway, but care must be taken to give it time to set before laying and paving the lines. Where the work had to be hurried, bituminous concrete was preferable. Rectangular cross sleepers injured the concrete by their vibration, but if they had slightly bevelled sides, this objection would be overcome. Tramways with cast-iron bearings had been constructed in this country to a limited extent, but timber was preferable as the jarring was diminished, and the travelling was rendered noiseless and agreeable. The life of the rail was also probably increased, and the concrete was saved from injury. Flat grooved rails, spiked through the grove, were first used, but the spiko-heads wore so quickly that it was necessary to adopt a side fastening, and flanges were added to the rail, with holes into which clips were driven. The objection to this rail was that the fasteners projected and kept paving stones away from it. The author had introduced a rail, the flanges of which were brought in beneath the thickness of the clip, so that the clip could be driven flush with the rail. The paving of a tramway was expensive, but indispensable, as without such protection the rails would be shaken loose, forced out of gauge, and worn quickly. A row of paving stones on each side of the rail, with macadam between, was unsatisfactory, as it could not be kept in repair, so that the horses were lamed by running on an uneven roadway. Experiments had been made with wood, concrete and asphalt paving; but the wear along the sides of the rails was so great that nothing would endure but stone. An impervious pavement was of special value on a tramway, as it prevented the water sinking alongside the rails. Cast-iron crossings wore out so quickly, that it was better to lay the rails throughout with all necessary curves, and then having marked the places where the rails crossed, the crossings should be made by scarfing the rail and laying the scarfed rail on the continuous timber, while the scarfed timber was bridged by the continuous rail. The wear of points was chiefly confined to a portion about 2 feet long. By the insertion of a changeable piece, bevelled in front and secured by a pin behind, this portion of the points might be renewed, at a trifling cost, without the point having to be taken up. A system had been adopted in several provincial towns in which the rail was supported on cast-iron chairs placed 3 feet apart. In Manchester, an experiment was to be tried by constructing the tramways with a continuous cast-iron bearing. Though abroad, where timber would be subject to the ravages of insects, iron tramways might be the only alternative, no advantage would be gained by laying them in this country.

The tendency of recent legislation had encouraged engineers to turn their attention to the important question of mechanical motive power for tramways. The difficulties to be surmounted were numerous. The tramway engines hitherto experimented with, at all successfully, had been of three kinds. 1st. Steam engine and car in one, as Grantham's. 2nd. Steam engine separate from car, as Merryweather's and Hughes's. 3rd. Pneumatic car and engine in one, as Scott Moncrieff's and M&car'ski's. There was a difference of opinion as to whether it was more desirable to have the engine and car combined or separate. The combined engine had the advantage in adhesion, in passing round curves and in shunting; while the detached engine entailed less alteration to rolling stock, permitted of two cars being attached on occasions, was safer for passengers, and more easily repaired. The latter could also be designed with greater freedom, and where steam was used no doubt the detached engine would be generally adopted. The Grantham car could be driven and stopped with perfect ease. It required a stoker, and the smoke and steam which

issued from it were objectionable. Messrs. Merryweather had many engines at work, chiefly on the Continent. They were well under control, and an engine drew forty-eight passengers on various ascending gradients up to 1 in 35. The exhaust steam was got rid of by decomposition, condensation and superheating. Messrs. Henry Hughes and Co. had achieved a good deal of success with their engine. The exhaust steam was disposed of by condensation. The firing of the engine was completed before it started on a journey; thus much nuisance was saved, and a stoker was dispensed with. On the level, and on gradients up to 1 in 30, engines could do all that was necessary; but the engine had yet to be designed that would stop and start again, with a heavy car behind it, on any steeper inclination, without trouble and delay. A pneumatic car, designed by Mr. Scott Moncrieff, had been at work on the Valo of Clyde tramways. It was capable of carrying 100 cubic feet of air, at a pressure of 350 lbs. on the square inch. Considering that everything connected with this car was of a rough and temporary character, the success attained was encouraging. M. M&car'ski, of Paris, had invented an engine driven by compressed air, heated before admission into the cylinders, by being led through a hot-water vessel. It was not easy at present to make any reliable comparison between the relative cost of horse and steam power on tramways. If attempted it was likely to err in favour of steam. Where steam could be introduced there would be a saving, but less than was generally expected. The repairs of the engines would be a serious matter, and the engine-fitters and drivers would require high wages.

The tramway carriages built by Messrs. John Stephenson and Co. for the New York and Harlem-street railway, in 1832, had the form of ordinary road coaches. Leather springs were first used, then steel, and now indiarubber. The best wheels for tramway cars were cast-iron waved plate wheels, such as were manufactured by the Lobdell Company. These permitted the outside rim to be sufficiently chilled, while the centre portion was not left in tension. Chilled cast-iron wheels would not last more than from ten to fifteen months in England, but in America they lasted longer, as there was no groove in the rail and the wheel had freedom. Brakes should be of chilled cast-iron and work on the flange, as it was necessary to wear that as rapidly as the tread, else the resistance would be increased and the rail split.

## RE SANITARY PROGRESS IN DUBLIN.

We wish we could thoroughly endorse the annexed statements made in our excellent contemporary the *Sanitary Record*. In a review of six months' work, and particularly in reference to the results said to be obtained by the series of letters written on the sanitary state of Dublin by the late Commissioner of above journal, it is stated as accomplished facts that—

"The Dublin Corporation have adopted the Artisans' Dwellings Act, and have voted a sum of upwards of £30,000 to enforce the efficient carrying out of its provisions, so far as one large area, specially condemned by our commissioner, is concerned. They have memorialised Sir Michael Hicks Beach, the Irish Secretary, to appoint a special magistrate, whose whole time is to be devoted to sanitary cases under the Public Health Act. The cow-sheds and dairy yards have been specially overhauled, many improvements have been introduced, the overcrowding and want of cleanliness have been greatly mitigated, and they have decided to enforce other important sanitary reforms. Last, though not least, a new system of scavenging has been approved, and a special surveyor has been appointed to insure a fair trial of the scheme, and as a guarantee to the inhabitants that the reproach which now attaches to the city on account of the filthy condition of the streets and thoroughfares shall be removed. We congratulate the authorities of the Corporation of

Dublin on the energetic manner in which they are devoting themselves to the task of sanitary reform, which we so strongly urged them to undertake."

It may seem somewhat ungracious on our part to have to undeceive our contemporary; but, living in the city to which it refers, we may be expected to know what has really been done. The Corporation has certainly made half a dozen of characteristic spurts in various matters, that have amounted to little more than talk. At memorialising and voting, the Dublin Town Council are unmatched, but their resolutions on such subjects as public health and improvements generally end as they begin. We are likely to wait a considerable time yet before we see them earnestly carrying out the provisions of the Artisans' Dwellings Act. We have recently told of their supineness in respect to this important measure. The scavenging of Dublin is still a disgrace to all concerned, and is not likely to be soon improved upon, notwithstanding any new appointment. A multiplicity of officers has generally resulted in the less work performed, owing to utterly bad systems of management that find favour on Cork Hill. It would be a matter for rejoicing if we could assure our contemporary that its glowing picture of sanitary progress in Dublin was true in substance and in fact, and that all it has indicated has been or is being at this moment practically carried out. The most we can say is, that several members of our Corporation are anxious to see the works specified proceeded with, and that the Corporation as a body, through the pressure of public opinion, at last begin to feel it incumbent upon them to do some work, as well as talk about doing it. Between contemplated works and works in process of completion there is a wide difference, and the former phase of passiveness has always suited the imaginative mind of our Corporation better than the latter.

## INDUSTRIAL EDUCATION.

At the late meeting of the Statistical and Social Inquiry Society, the Recorder of Dublin read a very instructive and suggestive paper on the importance of a larger infusion of the industrial element into our system of education in this country, and an adaptation to Ireland of the industrial clauses of Lord Sandon's bill.

Having alluded to the startling figures quoted by Mr. O'Shaughnessy, M.P., in the House of Commons on the 16th March last, that of the 1,500,000 children of school age in Ireland, 1,000,000 of whom were on the rolls of the National Schools, the average attendance was 389,000 only, and the actual number attending school was 792,000, he next alluded to the subject of compulsion, saying that the prevailing sense seemed to be that we were not ripe here for the adoption of universal compulsion, though the Chief Secretary expressed a hope that some amendment might soon be found by extending compulsion in the case of enrolled scholars, and by payment of the fees for parents who are too poor themselves.

The Recorder, in allusion to the love of idleness manifested by our youth in several directions, said that for truancy beguiled by house sports or wild flowers, the sooner compulsion were established the better. Whatever system of mere compulsion were adopted, there are thousands upon thousands in this country, and chiefly in its towns—and chiefest of all in this town—whom it would never reach. His object was twofold—to submit, only as suggestions, that our general National system of education in Ireland

\* By Mr. Robinson Souttar. Read at meeting of Institution of Civil Engineers, London, April 24th.



needs more of the industrial element, but to contend specifically for the assimilation of the law with respect to industrial schools, at least so far as to extend to Ireland the day school system introduced last session.

Speaking of the want of the industrial element, the Recorder said—Many good people, I fear, at times forget the tremendous sacrifice at which the very poor are often required to enforce school attendance on their children. Where the house father earns wages scarcely enough to keep the bodies and souls of the house together, the value to the family store of what pence the little hands and feet may earn can hardly be estimated. What is this when they can add shillings? An elementary training without an occupation in which it can be applied is not always an un-mixed blessing. It may then be a source of discontent rather than of contentment. I should like to know how much of the chronic restlessness and discontent which has agitated our population during the last thirty years is due to the kind of dissatisfaction I point to. Primary education, divorced from industry, making its recipient ready for anything in general, but fit for nothing in particular, has, I believe, frequently acted as a barrier rather than a passport to employment.

The biography of literary pauperism in the present day, I have reason to know, would be a very curious volume, and, I am sorry to add, an ample one; and the literature of begging letters, as the Charity Organization Society will tell you, is as copious as it is well written. The man able to read and write, but without a trade, when he emigrates, takes caste below the lowest artisan, and frequently re-immigrates to swell the army of those at home who are looking for a situation. Once his character for honesty or sobriety is tarnished, his fall is often irretrievable, whilst the skilled "hand" can work back his social redemption after many slips and backslidings. The truth is, our poor people in Ireland are, from their very brightness and vivacity of intelligence, too inclined towards the speculative and abstract, and too little disposed to the concrete and the practical, and education divorced from labour does not help this. Everybody can talk about everything, but to do something is a different thing. Why are there complaints on every side of the increasing disinclination for hard work and hand work. The "handyman" of my childhood is as extinct as is the pre-Adamite. The servant girls are no longer the needlewomen they used to be; they are as unable as they are unwilling to make their own dresses; their time too often goes in studying the Paris fashions, and their wages in getting milliners to ape them. How few girl children of the poor are so taught as to fit them to be thrifty housewives of those artisans' dwellings about which we are thinking so much now-a-days. That they should have learned the three "R's" is very well, not when it is at the cost of the three "C's"—cleanliness, cooking, and comfort. I earnestly believe that a greater infusion of the industrial element into the national training in this country would increase both the popularity and usefulness of our National Schools, and that under such a united system the 700,000 truants would be rapidly absorbed. What I do submit with earnest conviction is, that into schoolrooms merely literary never can be drawn the child-denizens of our Dublin slums—the offspring of those whom Victor Hugo calls "Les Misérables"—the children who pass an infancy of apathy or vagrant gutter life, to emerge too often into manhood and womanhood of vice and crime. Many of our city children, higher and less wretched far than these, I believe to be practically as beyond the reach of the compelling rod of any law that Parliament would pass to drive them to five years of reading and writing only. Offer them a daily resort, where for eight or ten hours they will keep out of harm's way, given a simple and wholesome meal or two, three hours for the three R's, one for play, and four to six to learn to use their hands with skill and usefulness, thus

early by their own industry working for the food and training given them, and you afford a stimulus to regularity in themselves and their parents stronger than any penal section which Parliament could pass, or magistrates administer, and you will be training no longer recruits for the army of the reckless and the restless, but contributors to the national stability and wealth, progenitive both for this island and the countries whose labour markets this island feeds, of that manufacturing faculty, that turn for handicraft, in which we have long been behind the peoples of Great Britain and of Western Europe, and the want of which has kept us traditionally less prosperous.

The Recorder then alluded to the differences between English and Irish statutes as to Industrial Schools, and compared the boarding and day Industrial Schools. With regard to the former he said—Their very excellence is not, without some reason, alleged against them; they are very expensive; the net cost at Artane for each child is £20 a-year—no inconsiderable portion of the annual charge for a gentleman's son at our best Royal Schools. That the son of a drunken and dissolute artisan should be maintained in a way that the best conducted working man could procure for his child, is socially unfair, and may be said to put a premium on misconduct. In the day schools the expenses per head will be but one-sixth of that in the boarding schools. As the children sleep at home, the home relations are preserved as far for them as possible; whilst even in the wretched dwellings where these are in lowest form, it has practically been found in many cases that the children return from their well-passed school hours night missionaries of order and sobriety to their degraded parents. No ignoble form this of filial piety. In conclusion, the Recorder said he did not conceal that he read this paper in the interest of his special clients, the poor population of this city, with whom he would fain have nobler relations than sentencing their criminals or limiting their drink.

We commend the excellent remarks of our worthy Recorder to all whom they may concern, and indeed they may be said to concern us all. Many systems of national education have been proposed for this country within the last hundred years, but each and all of them have been sadly deficient in the industrial element as a whole. We are advocates for a judicious system of compulsion, believing it criminal to allow children to grow up in a state of ignorance.

#### THE ARTISANS AND LABOURERS' DWELLINGS ACT IN LONDON.

In the report of a year's work executed by the Commission of Sewers, London, prepared by Mr. William Haywood, the Engineer and Surveyor to the Commission, the following particulars are given of the operations under the Artisans and Labourers' Dwellings Improvement Act in the City of London (the city proper):—The Medical Officer of Health, in his report of the 19th of October, 1875, submitted twenty-one areas within the city as being unfit for human habitation, and the report was again referred to a committee to inquire into. The committee having reported on the matter, the Commission, on the 28th of March, 1876, resolved to have an improvement scheme prepared in respect of the following areas, namely, Blewitt's-buildings, Golden-lane, Petticoat-square, Stoney-lane, Meeting House-yard, and Seven Step-alley, and it was referred to the Engineer to carry this into effect. Owing to the property in Seven Step-alley having been demolished for the works of the Aldgate extension of the Metropolitan Railway, an improvement scheme was not needed for that site, but a scheme was prepared by the Engineer for the remaining areas, which was finally approved by the Commission on the 24th of

October last. Subsequently the requisite notices were given, the plans lodged, and the scheme is now in the hands of the Home Department of the Government. This scheme involves the demolition of property covering about 3½ acres of land, and the removal of about 2,113 inhabitants; the sites obtainable by this demolition will give sufficient area for the construction of dwellings capable of accommodating not less than that number of people. The net cost to the citizens of the provision of these sites is estimated by me at £284,544, or in other words, that amount will have to be paid out of the public rates of the city in order to provide suitable sites for houses for poor people.

#### THE PRESERVATION OF THE IRISH LANGUAGE.

*Apropos* to our notice of Canon Bourke's work on "The Aryan Origin of the Gaelic Race and Language"—a book which we have no doubt will give an impetus to the efforts now being made by the recently-formed "Society for the Preservation of the Irish Language,"—we would remind our countrymen that a time has arrived at last for proving their practical patriotism, irrespective of creed or party. A very respectable and representative council or committee has been formed, as may be seen by the advertisement elsewhere in our pages; and it becomes the bounden duty of all of our right-thinking countrymen to assist the new society, by their adhesion as members and their contributions as earnest helpers in the work necessary to be organised and carried out for the preservation of our native tongue. Why they should do so, we have already told on more than one occasion. What the Scottish Gael have done and are doing in the Highlands, and what the Welch have done and are nobly continuing to do, ought to be sufficient examples for encouragement for Irishmen to imitate. Though Government assistance is now refused, a good beginning can be made without such aid, if only a determined and persistent effort is made by our countrymen; and no doubt the aid refused now will be forthcoming at a future time, when we have shown by our exertions we have deserved success, and are in a position to command it.

#### ROYAL INSTITUTE OF BRITISH ARCHITECTS AND THE ARCHITECTURAL ASSOCIATION.

Two papers were read at the ordinary meeting of the first-named body on the 9th ult., by Mr. Phené Spiers and Mr. Teulon, on some of the condemned churches of the City of London. The first was in the form of a report prepared under the direction of a sub-committee, and the second paper dealt with the general question involved on the removal of these city churches. The report described the chief points of historical and constructional interest in connection with the churches which were erected after the Great Fire of London by Sir Christopher Wren on the sites of former edifices. An interesting discussion ensued, and at the conclusion of the proceedings votes of thanks were moved to the sub-committee and Mr. Teulon for their papers.

At the meeting of the Institute held on the 23rd ult., a paper was to have been read by Sir Gilbert Scott on St. Alban's Abbey, but, in consequence of pressure of business preventing the distinguished architect preparing it in time, its place was supplied by a paper read by Mr. Thomas Morris on the "Metropolitan Streets New Bill."

On the 21st ult., a visit was made by members of the Architectural Association to Messrs. Doulton's new warehouses and factory at Lambeth; and at the meeting of the association held on Friday last, a paper was read by Mr. Thomas Williams "On Architecture as Contributory to Pictorial Art."



## THE LOCAL INQUIRY AT THE CITY HALL.

On Saturday the Commissioners concluded their inquiry into the four subjects referred to them by the Committee of the House of Commons.

Mr. O'Donnell, accountant, was examined as to the Improvement Rate, which last year produced an income of £55,019. There was between £6,000 and £7,000 of the rate uncollectable. The manure taken off the Dublin streets was unsaleable.

Mr. Corbett.—In some towns the street manure was a source of considerable income. In Belfast it reached several thousand pounds.

Mr. O'Donnell.—In Dublin the amount realized last year was only £169.

Mr. Corbett.—£1,300,000 seemed to be a large sum to have expended under the Improvement Act since 1851, when they looked at the present state of Dublin streets!!

Mr. O'Donnell said the Dublin streets would swallow a great deal of money they had such a bad foundation.

Mr. Parke Neville, City Engineer, was examined as to the scavenging and paving of the streets. He said there were at present 136 men employed in the scavenging work—63 on the north side and 73 on the south side—at a cost of about £180 a week. The labourers are paid 15s. a week, including wages for half day work on Sunday mornings. The payment of the men who were not doing any work arose from the fact that the Corporation had no power to pension men who had been 30 or 40 years in their service and were unable to do duty. He supposed the payment in the name of a man who was dead arose through the man's wife coming to receive his wages.

Mr. Corbett.—Oh, I don't suppose the dead man came himself!

Mr. Neville.—The Corporation were now using paving sets instead of macadamising the streets. They were not flagging any more of the footpaths. The cost of the asphalt was 5s. 6d., while the cost of the flagging was 9s. 6d. a yard. They had not sufficient funds to scavenge the Dublin streets. The manure depôts were nearly all filled, and there was great difficulty in procuring new sites for depôts. The Corporation offered the manure for nothing, but it would not be taken. It was almost entirely macadam pulverised, and was, therefore unsaleable as manure. The cost of scavenging was about £180 a week. The Corporation had less funds for the purpose than the old Commissioners had for a less area, when the cost was about half what it is now.

Mr. Corbett said he had never seen in the worst part of London, in snowy weather, any street so bad as Abbey-street was some time ago when there was no snow at all.

Mr. French, T.C., stated that the Town Clerk had given the security which was required of him, in consequence of some recent occurrences in his office.

The Hon. Mr. Vereker, T.C., said he had large experience as to landed property, and he believed the Corporation were unsuited to the management of landed estates. The Corporation was much in debt. The influence brought to bear in regard to the granting of leases was another reason why the Corporation should not undertake the management of such property. The members were guided more by love of popularity than the desire to obtain profit. They were unable to do their duty, and they had now thrown the onus on the Lords of the Treasury.

Mr. Byrne said the objection to selling the lands was that the leases had in many cases nearly expired. These leases had been given at rents much below the present value of the property. For instance, Lord Clifden held property extending from Arran-quay to the Royal Barracks, at a rent of £130 a year, and that property was now worth between £9,000 and £10,000 a year.

The Hon. Mr. Vereker thought the sale of the land should be gradual. The Corporation should devote themselves entirely to the cleansing of the streets. There was scarcely a house or shop belonging to the Corporation let without canvassing out of doors, for it was supposed that any one having a friend in the Corporation could get a quiet vote for himself.

Mr. Byrne said the city debt which 12 years ago was £210,000 was reduced in 1875 by £13,600. At least 25 members of the Corporation were landed proprietors.

Some further evidence having been taken the inquiry terminated.

Mr. Corbett said the Commissioners would read over the evidence, and if any point seemed to have been overlooked they would communicate with the officers of the Corporation.

## HOME AND FOREIGN NOTES.

### ARCHITECTURAL ASSOCIATION OF IRELAND.

—An ordinary general meeting will be held at the rooms of the association, on Thursday, 3rd of May, 1877, at eight o'clock, p.m., when a paper will be read by Mr. C. H. Brice on "The National Monuments of Ireland."

Thirty-two sets of designs have been sent for competition for the covered market proposed to be erected at Iluddersfield. The committee of the corporation limited the cost to £16,000, but most of the designs—especially the best—are estimated upon an outlay of nearly double that sum.

A STATUE TO BURNS IN DUMFRIES.—At a recent meeting of the Town Council of Dumfries, a motion was made and agreed to for the erection of a statue of Burns in that town. A committee was appointed to take the necessary steps to carry out the proposition.

THE NAPIER MAGDALA MEMORIAL.—The money for the Napier of Magdala memorial has nearly been subscribed in Bengal. As many object to the form of the memorial, it is in contemplation to change it from a statue to a home, or houses, in the hills for soldiers' children in the three presidencies.

On Tuesday morning the roof of a skating rink, which is being erected at Eccles, near Manchester, fell in. The side and one end wall had been raised. The roof had been carried over more than three-fourths of the area (the span is 60 ft.), when the whole suddenly gave way, bringing three men down who were at work on the top, and injuring two men below.

THE NAPLES FINE ARTS EXHIBITION.—The Exhibition of Fine Arts at Naples was opened on the 10th ult. by the king in person. It comprises every variety of art from the fourth to the nineteenth centuries, derived principally from private sources. One of the great attractions is a series of statuettes in wood from San Martino di Moscar, representing a "Presepio."

THE WELLINGTON MONUMENT, ST. PAUL'S.—A member of parliament peering through a crack in a boarding is not a particularly dignified exhibition; yet such appears to have been the only means by which Mr. Goldsmid could form an idea as to the state of progress in which the Wellington Monument stands at present, after the expiration of half a century's labour upon it. Judging by his somewhat cursory glance, the hon. member thought it would be a long time yet before it was finished, and so, by way of a gentle reminder, he objected to the perennial vote which appears upon the estimates for this purpose. The Commissioner of Works, however, said he had been to St. Paul's to see the monument, and had been given to understand it would be completed in two months. We shall believe it when we see it.—*Broad Arrow.*

### EQUALISATION OF WEIGHTS AND MEASURES.

—It is expected that Mr. A. H. Brown, M.P. for Wenlock, will shortly bring before the House of Commons a motion in favour of the equalisation of weights and measures, and the adoption of the decimal system in this country. It is also probable that Lord Sandon will be asked why he struck out from the Education Code the clause which provided that children of the fifth and sixth standards should be taught the metric system. The question is now making considerable progress in various countries. Canada has lately adopted the decimal principal in weights and measures, as well as in coinage; while Germany has equalised weights and measures throughout the empire, and carried out the duo-decimal system in respect to money. The Cobden Club is actively engaged in promoting this movement, and is achieving considerable success.

"EXPOSING" GOODS FOR SALE.—Liverpool tradesmen are just now experiencing a good deal of trouble at the hands of the police. Summonses have been heard against shopkeepers for exposing their goods for sale contrary to the local bye-laws, and in many cases fines have been imposed because the goods exposed projected an inch or two beyond the shop door. In the case of Mr. Nixon, provision dealer, Byrom-street, the officer who laid the information said that defendant had several pieces of bacon suspended from the cornice of his shop. They projected three or four inches from the wall, and were 9 ft. high. Dr. Commins, who appeared to defend, contended that the bacon had not been exposed for sale, but was hung up to dry, and he called a witness who corroborated this statement. The magistrate said that the bacon, it was admitted, was hung up; and the words of the Act were, "hang up or expose for sale." The defendant must pay a fine of 2s. 6d., and 2s. 6d. costs.

### STANDARD WEIGHTS AND MEASURES.—At

the Local Government Inquiry now being held at the City Hall Dr. Norwood mentioned to the Commissioners that under an Act of Parliament passed in 1826, three sets of standard weights and measures were made—one for England, one for Ireland, and one for Scotland. The set for England was destroyed in 1835, by a fire which took place in the Tower of London, where they had been lodged; and the Scotch set, destined for Edinburgh, were shipped to Leith, but the vessel carrying them had an unpropitious voyage, and the weights went to the bottom of the sea. The Irish set which are formed of metals best calculated to resist atmospheric influences, are lodged in the muniment room of the City Hall. The weights and measures used in this country should be adjusted in accordance with them. Within the last few months they were sent over in charge of an officer of the Corporation to London, as an official there designated the "Warden of the Standard" required them for the purpose of having adjusted certain weights and measures under his control.

### THE PROPOSED WIDENING OF TALBOT-STREET.

—At a meeting of a sub-committee of No. 1 Committee, to take into consideration the proposed widening of Talbot-street, Mr. Graham Leuon attended, and explained details of his tenure of the buildings which project beyond the line of frontage, Mr. Kane, Mr. Varian, and Mr. Nagle as owners of premises in Talbot-street which would be benefited by the alteration, were also in attendance. The want of funds sufficient to satisfy the claims of persons for the ground which it is necessary should be added to the roadway was represented, and it was resolved that an urgent effort should be made to obtain from the occupiers and owners of property in the neighbourhood an adequate sum to supplement the contribution of the Corporation, and enable this desirable improvement to be effected. It would be equally desirable if the Corporation would take the question of the chronic obstructions to public traffic on the part of shopkeepers in Earl-street and Talbot-street under their consideration. Of course vested interests block the way, and members that need votes will be slow to offend the petty shopocracy.

### THE CAXTON CELEBRATION.—At the exhibi-

tion in celebration of the 400th anniversary of the introduction of printing into England by William Caxton, to be opened in London on the 11th prox., we (*Printing Trades Journal*) believe that we are correct in stating that not only will old printing presses and material be exhibited, but modern printing machinery of the very best and highest description will be shown in motion. We certainly hope to see a Walter press, as it will not only prove attractive to printers, but equally or even more so to the general public. In speaking of the 400th anniversary of the introduction of printing into England, we may mention that the date is taken from the appearance in 1477 of the "Dictes and Sayings of the Philosophers," which was printed in England, by William Caxton, in that year, and is the first known work bearing a date. Caxton, as appears by several of his books, set up his press at Westminster Abbey, but the term Westminster Abbey at that time meant not only the Abbey, but the whole of the precincts which extended for some considerable distance around the Abbey itself.

### FERN CULTURE.—There are few places where

even the poorest cannot obtain ferns. Flowers that are cultivated—and our garden flowers require cultivation for their proper development—are often beyond the reach of the poor; and no one brings the roots of wild flowers into our towns. If they were brought hither, they would pine away, perhaps more quickly than our garden flowers; and they at least would not thrive any better in the absence of that one vitalising element—sun. But ferns that grow in wild woods and open plains are in the free right of all who choose to gather them. They are gathered sometimes, and brought into our towns and cities by itinerant vendors; but you seldom see them in the dwellings of the poor. They nevertheless might be there. If there were a demand, the poor purveyors of the poor would soon bring a supply from the free wild country where they grow; and there would be that demand if the poor knew more about these exquisite plants. Ferns will grow where flowering plants would perish. They require moisture and shade—not stagnant, but percolating moisture. Place them where you will—on the floor, on the table of a dimly-lighted room, in the sunless window-sill, in a shady corner, anywhere—and they will grow and develop, unrolling their charming fronds, and exhibiting their sweet feathery forms with all their natural grace, in the presence of squalor and misery.—*The Fern Paradise.* By Francis George Heath.



**FINDS.**—A curious brass vessel has been discovered on the property of Mr. T. Walpole, J.P., Monarehid, by one of his workmen named Patrick Grady. It was found in a drained swamp on the edge of a bog, adjoining an old abbey, and bears evidence of some antiquity. In shape the vessel resembles a vase, and is covered with an oaken lid, with a piece of strong cloth or linen wrapped round the edge, to make it fit tightly. Grady states that the vessel was full of water when he dug it out, but his neighbours give him credit for having the wit to remove the money which it was supposed to contain! Some other men in Mr. Walpole's employment found at the same time a bronze sword, and a number of old brass coins.

**ADVANTAGES OF GAS ENGINES.**—Gas-engines have been made and used, and are still made and used. For some purposes they do actually supersede steam-engines. The principle of their action is simple enough. A mixture of ordinary coal-gas and air in due proportion explodes when a light is applied to it. This explosion is due to the combination of the carbon and hydrogen of the gas with the oxygen of the air, and the result of the explosion is an evolution of much heat and consequent exertion of expansive force, which is communicated by the gases remaining after explosion to a piston suitably placed and connected with proper mechanical arrangements. The motive force is exactly the same as that of the steam-engine, and it is exerted in a very similar manner. In fact, a gas-engine is to some extent a steam-engine, for a considerable portion of the gases which by their expansion after the explosion, actuate the piston, is the steam produced by the combination of hydrogen with the oxygen of the air. These engines are very convenient where gas is laid on, and power is required only at intervals. The expense of keeping a fire continually lighted, and a boiler continually heated, or the delay and expense of getting up steam every time the engine is required, are saved. By simply lighting a little jet and turning on the gas these engines are set going at full power immediately, and they are stopped as easily, no stoker being required. They are much more expensive than steam engines when continuously working, or when high power is required, but more economical and convenient for low power and intermittent work. Their advantages and disadvantages resemble those of gas-stoves as compared with coal fires, and depend on the same reasons. They are now extensively used, but their use is necessarily limited to stationary engines, and to places where gas is supplied..

### TO CORRESPONDENTS.

**PUBLICATIONS.**—The next report of the Deputy Keeper of the Public Records in Ireland, will furnish a continuation of the particulars to which you refer.  
**C. E. (London).**—We could not spare space at present for a series of articles upon the subject, but after the lapse of some time we might be able to make arrangements.  
**Horse Owner.**—We do not undertake to give legal advice. Consult a respectable solicitor.  
**K. AND SONS.**—See our second paragraph under heading of "Notices" in every issue.  
**RECEIVED.**—Architect (London)—An Actor—H. B. (Cork)—A Carpenter—M. D.—Sanitas—A Citizen—R.D.S.—B. A.—Aryan—F.S.A.—W. C.—&c.

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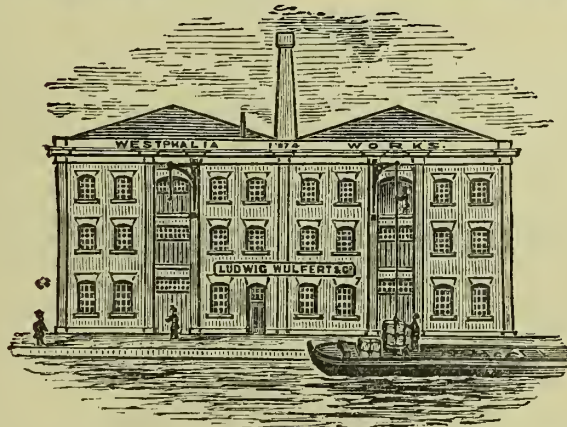
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

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## Illustration.

NEW BRIDGES OVER THE LIFFEY—  
ELEVATION OF CARLISLE BRIDGE.  
SWING BRIDGE EAST OF CARLISLE BRIDGE.

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## THE IRISH BUILDER.

VOL. XIX.—No. 418.

CHARACTERISTICS OF  
THE DUBLIN OPERATIVES OF THE  
OLD SCHOOL.

**B**ETWEEN eighty and a hundred years ago the Dublin operative of the old school, learned and unlearned, flourished in all his pride and glory. Octogenarians are, however, still in our midst, who have lively memories of the operatives of their young days in the early part of this century, who differed little from their sires in habits, manners, and customs. We have ourselves, though born into the world at a later period, a distinct recollection of a few operatives of the old school, who served their apprenticeship, and worked as journeymen, in the last century; and for upwards of forty years in the present century continued to work at their craft. These old artisans—no matter how scant their education might have been—and it was often scant enough,—made up for their want of book learning by practical skill and experience, and were mostly gifted with wonderful and retentive memories. The intelligent operative of the old school was born, and worked long enough before the era of Dublin penny journals, or other weekly periodical literature. When he could read and write, his taste led him to the purchase of old chap-books and pamphlets, political and polemical trials, executions, lives of noted highwaymen and robbers, voyages, and books of travels, and other kindred and marvellous kinds of literature.

The Dublin operative of the old school was a confirmed controversialist, and any controversy or great sermon on points of religion between the two Churches exercised his mind not a little. The ditty of the street ballad-singer gave him joy, and the minstrels of either sex were often followed the length of a street by the workman and his brethren, particularly if the ballad was well spiced with strong political or religious feeling, and was sung in a loud and demonstrative manner. Newspapers, daily or weekly, were too

dear for the pockets of the olden operatives, and were seldom patronized except during times of great commotion, a foreign war, or a native rebellion. News from America about Washington, and the English forces; of the Irish Volunteers, and fierce debates in the Irish Parliament; the United Irishmen and the Union; Napoleon and Russia; Nelson and his victories; and Wellington and the Peninsular War; these and similar stirring incidents roused the attention of the learned and unlearned operative of the old school, and often drew him away from his work. Monday was not the only idle day, for the idle saint was not only patronized on that day, but generally got the next day devoted to him as a "tally," to make up weight or deficiency of glorification. The building operatives of the old school when in their cups on mock saints' days, and other holidays, were often a lawless class. Though the combination laws were severe at the close of the last century, and the earlier portion of the present, the law did not interfere with workmen for idling on the first day of the week. Monday and Tuesday, and often Wednesday, were wasted by building operatives, through the perversity of the men of one or more of the branches of the building trades. The sawyers were generally credited with being the worst; and, though betimes there was not much difference between them and their brother craftsmen—the carpenters, bricklayers, and plasterers—it often happened that owing to the wanton idleness of the sawyers, the whole of the other trades were "kept at a stand still." There were no saw mills in these times, either by steam or water power, for cutting timber, and the builders and carpenters were completely at the mercy of the sawyers, who worked when they liked, and idled when they liked. Houses remained unroofed, floors unlaied, partitions not put up, walls unbuilt and unplastered, all because the contumacious and "boozing" sawyer deserted his pit for the pleasures of the tap, and preferred drinking, debating, and fighting, to cutting joists, rafters, or partition scantling.

Despite of all this idleness and many serious excesses on the side of the operatives, and losses on the part of the employers and the public, the workmen, when they did work, performed their work well, and in a workmanlike and efficient manner. The old race of Dublin builders exacted good work from those they employed, and their clients had the satisfaction of knowing and finding, when the work was done, it was done well, and in all branches in a perfectly satisfactory manner. The modern system of "slop-work," "slush-work," or "scamping," was unknown, and "Jerry" building was undreamed of.

If proof be wanting to bear out our statements, let the reader enter into any of the old town mansions of this city, once inhabited by our nobility and gentry in the last century and the earlier part of the present, and examine the work for himself. He will be at once struck with its solidness, massiveness, effectiveness, and the efficient manner in which it has been executed in every branch of trade that had contributed to its completion. There is little or nothing to find fault with, judging the work by the standard of the time in which it was executed—good brickwork, good mortar, good plaster, good carpentry and joinery, and good workmanship all through, from basement to roof-tree. The iron-work and smith-work are sometimes

heavy, but they are excellent in material and workmanship; the stonework is well selected, and the jointing and carving well executed; the halls are large, the stairs wide, easy in ascent, well built, firm, and substantial; the handrails massive, and often elaborate and ornamental; the stucco work artistic and excellent, though heavy to modern tastes. The carpentry and joinery work of several of the town mansions of our old nobility and gentry is wonderful in its extent. The joinery work in a single house of the last century would do for half a dozen of houses of the present hour, and pieces of handicraft are to be found that would puzzle some of our present-day building operatives to execute or set out the lines for. Panelled partitions or wainscoting are not now put up in our town residences; door and window trimmings are considerably diminished; wooden cornices are not fixed round the top of rooms embracing a portion of wall and ceiling line; dados and surbasses are done away with, and scanty and poverty-stricken skirtings supply the place of deep mouldings and many-membered ones. These are the days of paper, lath, and plaster; of smudged, and daubed, and discoloured, instead of honest painted work; of imitation marbles and stone, and wooden chimney-pieces, instead of solid variegated and elaborate marble work, or beautiful statuary or oak carvings.

The cry of technical education was unknown among the operatives of the old school, and facilities for obtaining general knowledge were few; yet they performed a remarkable amount of good, durable, and skilful work. They served regular apprenticeships, and, when out of their term, they often travelled, and were truly and really journeymen, for they acquired knowledge and experience that they afterwards turned to good account for the credit of their trade and country. During the days of the Irish Parliament trade in most branches was rife, and in the building branches in particular. The building operatives of Dublin counted by several thousands, instead of a few hundreds; and though the working man's child had few facilities for education at a cheap rate, yet for the middle and upper classes there were schools and classical academies in almost every street of note, as a reference to our old directories will show.

It was a lawless time, in sooth, for all that, in Dublin one hundred years since, or eighty years, even sixty years ago, or less. Pressgangs were prowling about, tenders and hulks were awaiting and floating in our harbours and ports; the crews of collier boats were often afraid to enter Dublin Bay or come up the Liffey, in fear of being pressed; and the chief magistrate had often to be appealed to for the privilege of his protection in the interest of the public. Men were hanged in dozens for robbery, or transported in shiploads to Botany Bay; the gaols were often full, and the judges busy. The old municipal body jobbed, robbed, feasted and ruled; and the old city guilds helped the city fathers in wasting the public funds. The Irish Executive conspired and were conspired against, and used its power often with a vigour and a vengeance; public agitators and popular critics on the side of the masses attacked the governing power, sometimes successfully, though often worsted in the attempt; arrests, fines, and imprisonment followed. Some men were banished, more bought up or silenced; and a short reign of peace succeeded a long reign of terror, again and again



repeated for years. The sovereign rule in Dublin after all, was for long years misrule, and the law of the streets was club law. The city was full of aristocratic "bucks" and bloods, and plobcian roughs and swinge bucklers, operative "dare-devils" and "devil-may-cares." North and South Dublin had its factions, and they were not confined to butchers, or the heroes of Kennedy's-lane, Marrowbone-lane, or Ormond-market. The building and other operatives mingled in the frays, and took opposite sides; armed butchers were encountered, and sometimes routed, and ferocious apprentices knocked on the head, and left bleeding and speechless. The old "bulkies" or Charlies might spring their rattles in vain; and, indeed, at a safe distance, they only ventured in times of tumult to put in an appearance at all, for they were looked upon by opposing or attacking parties as positive enemies or intolerable nuisances, meeting with the reward of being sent floating down the Liffey with the outgoing tide in their own sentry-boxes.

His Majesty in those days stood in need of soldiers, good and bad, and the hectoring youth who half killed his man, or mayhap finished him in the street encounter, saved his own skin on the morrow by taking the shilling, and leaving his country for his country's good, to fight the fioree Indian, or fall and bleach his bones on other foreign fields, far from his once-beloved Marrowbone-lane or Ormond-market.

These were some of the pictures and scenes of olden Dublin, amidst which the operatives of the old school were born, worked, and flourished. We cannot attempt to justify their excesses and crimes; but, apart from the evil influences by which they were surrounded, the operatives of the building trade and some other trades have left us memorials of their efficient and conscientious workmanship, of which we have reason to feel proud. Let our workmen of to-day avoid their faults and offences, which they must to a great extent, and imitate their predecessors' painstaking and excellent handicraft, and, with the aid of improved general and technical education, the work they perform will also remain for the future examples of workmanship worthy of their craft and their country.

#### THE NATIONAL MONUMENTS OF IRELAND.\*

I HAVE selected the above subject for a paper this session, as I found that it had not been already put upon our programme; and also, as a considerable number of these remains have been placed by the Church Temporalities Commissioners in the charge of the public department with which I am connected; and I have naturally felt considerable interest in their present state, and the means to be taken for their conservation—an interest in which, I am sure, the members of the Association fully share. I sincerely wish my task fell into abler hands: it is well deserving of an evening's discussion, led by a worthier guide. In every country such monuments form some of the most reliable links in the chain of history, and increase in importance as contributory studies make progress; the remains examined multiply; and the observers become—in this and other ways—better fitted for their task. The work they have to do, like that of the geologist or the comparative anatomist, is dependent for success upon careful observation and comparison, coupled with a varied knowledge, only to be acquired in other fields of thought. The

archæologist must often be architect, historian, and philologist, in no mean degree, in order to make his decisions valuable in the eyes of a public, increasingly critical in these matters, and rapidly informed of each new theory or discovery. We have only to glance around us to realise the importance of a subject which our own country—both here and in England—is taking steps to place on a more satisfactory footing. In Palestine, at Ephesus, Mycenæ, and at Rome and other places, contributions are daily being made to our knowledge; and much that even within our own memories was regarded as mythical, or a mere poetic theory, is taking its place among accepted and demonstrated facts. The labours of the late Mr. G. Smith, of the British Museum; of Ir. Wood; of Dr. Schlieman, of the Ordnance Survey at Jerusalem, and elsewhere; of Mr. Parker, at Rome; of the Archæological Associations of Great Britain and the Continent; of our own Royal Archæological Association; and of Mr. Deane, as superintendent of our National Monuments; are each in their own spheres tending towards the common goal. The passing of Sir John Lubbock's, or some similar bill, for Great Britain, and an addition to the objects under Governmental care in Ireland, must facilitate the result desired, namely, a better knowledge of the history of our race, founded upon data capable of being separated more fully than hitherto from the perplexing and disturbing influences of passion and of romance.

I am bound, of course, to steer clear of these disturbing elements. I can have no pretence to any special knowledge. I wish to approach the matter in my real character of a student, and to content myself by laying before you some condensed material for our discussion. The question—regarding this country only, of course—seems naturally to divide itself into:—1. The field under review—2. What has been done therein,—and 3. What remains to be done?

There are some interesting lessons to be learned as we pass along, new to some of us; well-threshed and commonplace to others. You must pardon me if I take them as they arise. I have had the advantage of seeing a considerable number of our National Monuments; but I regret to say, for the most part, at a time when I was even less capable than now of appreciating the discussions to which they have given rise. The works of Petrie; of Brash; the splendid work left by the late Lord Dunraven, and edited by Miss Stokes; the special qualifications brought to his task by Mr. Wilkinson; and the labours of the Royal Archæological Association of Ireland, the Royal Irish Academy, and the Ordnance Survey, aid us in an intelligent *resumé* of our present knowledge; members of this Association, and of our Institute of Architects, have carefully measured and described some of them. The remains in question may be roughly classified as—

1. *The Rath, Lis, or Dun.*—Forts found scattered in great numbers all over the country. Ploughing has obliterated some; a large number, however, remain; and the reduction of the areas under tillage will tend to preserve a sufficient number of specimens.

2. *The Cahir, or Cashel.*—Two of these have been vested as national monuments under the Irish Church Act, viz.:—The Cashel of the Kings, in county Tipperary, well known as the Rock of Cashel; and one in the Valley of Glendalough, in the county Wicklow. In both cases, however, the enclosing wall has disappeared. It is probable that none of these which may be regarded as typical, are at present the property of the Church Temporalities Commissioners.

3. *Cloghans.*—These are of value as exhibiting the beginnings of stone roofing.

4. *The Cromlechs, or Druid Stones.*—They are generally found, as would be expected, where stone is abundant; and are likely to be preserved, from the fact that they do not offer much temptation to removal or destruction. In other countries (Denmark, I think, for instance), such remains are carefully pre-

served and a right of way maintained to them by the Stato.

5. *Sepulchral Mounds or Caves.*—As at Monasterboice, where they are outside the graveyard, on private property.

6. *Churches of Pre-Norman Type.*—Ranging from the earliest period down to the date of King Cormac's Chapel at Cashel (1134). Of this class the following have been already placed under government supervision, viz.:—Cormac's Chapel; Monasterboice; Glendalough; Ardferit; Ruins on Devenish Island; Donaghmore. Clonmacnoise was vested in the Church Representative Body, as service had been held in one of the churches, but I believe this is no longer the case.

7. *The Oratories.*—These are structurally a connecting link between the Cloghans, or Bee-hive dwellings and the early churches. They are represented at Gallerus (county Kerry), and at what has been called St. Columb's House, at Kells. These buildings are now vested in the Board of Works. I believe they may be looked on as belonging to an advanced type of the class. St. Malchedar, county Kerry, near Gallerus, would be placed with this class; and also St. Mollagga, in the county Cork.

8. *Reputed Tombs.*—As that of St. Declan in the churchyard at Ardmore, county Waterford. The difference between the oratory and what has been called the tomb appears to be very slight.

9. *The Round Towers.*—Of a list of 126, it is represented that 31 are already destroyed, 8 are vested as National Monuments, and the 2 at Clonmacnoise may perhaps be similarly treated; 5 or 6, I learn, are attached to churches still in use, and vested in the Church Representative Body, viz.:—Lusk, county Dublin; Castledermot and Kildare, county Kildare; Kilkenny (Cathedral of St. Canice); 2 at Clonmacnoise (King's county); Kells, county Meath. Of course many stand on private property, and some have received more or less attention at the hands of the proprietor, or of the Archæological Association, as at Clonmacnoise, &c.

10. *Holy Wells.*—Some are of considerable interest, and could be preserved at little cost.

11. *Crosses and Inscribed Stones.*—Many of these are beautiful and characteristic. Some have suffered greatly from the effects of weather and ill treatment.

12. *The Abbeys, Churches, Castles, and Mansions of Post-Norman Date.*—This list seems to include almost all the objects in "the field under review." Let us rapidly glance at some of them in more detail—the information they may be made to yield; and some of the theories which have been propounded respecting them. The limits of my paper, and of your patience, will make this a very rapid glance indeed. I have here on the table sufficient in the way of illustration to facilitate our discussion.

We must pass over the discussion as to the existence of buildings of stone and cement previous to the twelfth century, which was the theme of the earlier antiquaries, and trust to the buildings themselves as we go along to prove the truth or otherwise of the suggested solutions of this and similar problems. It is conceded now, on all hands, that the Pillar stone, the Cromlech, the Giants' Graves (as they are called), the Cashels, or stone-built forts, and the Cloghans, or stone-built houses or huts, head our lists. Many Pillar-stones, admittedly of Pagan times, now bear Christian symbols, placed there long after their erection. As respects the Druids' Altars, and the so-called "Giants' Graves," it is customary now to assert that they are sepulchral chambers. The covering mound—the earthen urn—when cremation was in vogue, and in some the presence of human remains, as in the case of the barrows figured in Mr. Jewett's book before you, are appealed to; and if you will look at the first series of photos in Lord Dunraven's book, also on the table, you can form a notion of what the early sea-coast fortresses, as on the Isles of Arran, really were.

\* By Mr. C. H. Brien, A.R.I.A.I. Read at Meeting of Architectural Association of Ireland, May 3rd.



The Cist in the reputed tombs would appear to have averaged 4 ft. by 4 ft., with covering stones of moderate size, and seem clearly designed for burial. In the case of the Cronlech, the large slab was supported on pillars, often at a considerable height; the space enclosed was not symmetrical, and no attempt was often made to complete the enclosure by filling. The Rath was a circular area varying from 20 ft. to 300 or more in diameter, with one, two, three, or more consecutive ramparts of earth, or earth and stones, with entrances of stone, and underground chambers, which seem to have been the earliest examples of constructive masonry. Not only is this so in our country, but strictly analogous types are to be found in every country where an attempt has been made to trace out such a history as we are now considering. Such of you as have read the recent papers of Dr. Schlieman, must have been struck by this proof of the essential unity of the race in this as in every other respect. The prefixes Rath and Dun are exceedingly numerous in Irish names; and the words which are synonymous with Cashel, &c. (a town or city), can be traced even in the names Carthage, Kars, and many others. Dr. Joyce states that the term Dun (Doon) is used as a prefix to 600 names of townlands, towns, and parishes. It is further stated that at the time of the commencement of the Ordnance Survey in the province of Munster, there were upwards of 10,000 Rathes. The Crofts of the Rathes are the most peculiar features, perhaps, to our survey; and the singularly clever means adopted to facilitate concealment and obstruction, are worthy of notice. Plates 47 and 48 of Mr. Brash's work\* give plans and sections of those at Parkmore and Finvarra, county Clare; and Kildun, &c., county Mayo. I believe they have never been found constructed with mortar, or any substitute for it.

Mr. Brash (in the book referred to) includes these buildings within what he has called the Pre-historic period, and speaks of them as examples of the primitive architecture of the country. He points out how the great Tumulus of New Grange contains masonry-built domed chambers, which have supported a crushing weight of earth for upwards of 2,500 years, and minutely describes and figures the Grianon of Ailceach, close to the shores of Lough Swilly, county Donegal. (Pl. i.) The internal diameter is 77 ft. 6 in.; the enclosing wall at present averages 6 ft. 6 in. in height, and is from 12 to 15 ft. in thickness. Dr. Petrie thus describes it:—"At the height of about 5 ft. from the base, on the interior face of the wall, the thickness is diminished about 2 ft. 6 in. by a terrace, the ascent to which was by staircases or flights of steps, increasing in breadth as they ascend, and situated at each side, but at unequal distances from the gateway. On each side of the entrance gateway there are galleries within the thickness of the wall, extending in length to one-half its entire circuit, and terminating at its northern and southern points. These galleries are 5 ft. high, and have sloping sides, being 2 ft. 2 in. wide at bottom, and 1 ft. 11 in. at top; they are covered by large stones laid horizontally. The jambs of the gateway still remain, and show it to have been about 6 ft. in height, 4 ft. 3 in. in width at bottom, and 4 ft. at top, and was lintelled with large slabs of stone." The masonry is also described:—"The stones, which are of the common grey schist of the district, are of polygonal forms, adjusted so as to fit each other, and wholly uncemented. They average about 2 ft. in length, and it is quite evident that they have been in many parts squared with the hammer, but not chiselled." Plate ii. gives a plan of the Caher at Ballycarberry, county Kerry; and an elevation of a part of the side wall of the Caher near Enniskean, county Cork.

Similar Duns are to be found at Caithness and Sutherland, in the north of Scotland; and Mr. Wilkinson refers to nine forts of this class in the west of Kerry. You can see at once that the system of overlapping in the circular and other chambers is the same in principle as the so-called Treasury of Atreus, at Mycenæ, and also in the tombs of the Etrurians.

The subject is so extensive that I must not be tempted to linger over this early period. We must pass to the oratories, which seem to have been the earliest religious buildings erected in this country. With a few exceptions they are constructed of cemented masonry. We will take Mollagga, county Cork, as an example. This building is 10 ft. by 7 ft. 2 in. clear of wall, which are 2 ft. 9 in. thick.

There was two distinct types of oratory—those without the upper chamber, or overcroft, as at Mollagga, and those with this chamber, as at St. Kevin's, Glendalough. They show the peculiar feature of the prolongation of the side walls, which was often continued up the gable. St. Molua's Oratory, Killaloe; Gallerus, and Kilmalchedar, seem to be connecting links with St. Kevin's, the more advanced type. They had east windows placed high in the gable, and western doors. The simple ones, although stone roofed, did not exhibit the principle of the arch, but were built of rectangular slabs, in overlaid slabs. At St. Kevin's a nave has been added. At Gallerus and Kilmalchedar you have the pointed and ogee arch internally; both are of uncemented masonry. The Clochans, or bee-hive dwellings—the early dwellings proper—are found in the west of the county Cork, through Kerry, and on the coasts or islands of Clare, Galway, and Mayo. They are usually circular on plan, 10 ft. to 20 ft. in diameter, in clear of walls, which are from 4 ft. to 8 ft. thick; they have a section of a bee-hive form, and the overlapping roof with diminishing thickness; and the inclined jambed door-ope of all the early structures. Some seem to have had two, apparently to be used alternately, as the winds happened to prevail. They are often enclosed in groups of from two to six (as I have shown) within walls of masonry. It is probable that this early type of dwelling led up through the curved section, as at Gallerus, &c., to the rectangular. As respects the history of the arched forms, you see at St. Kevin's, Glendalough, the rectangular and the arched combined. At the building known as St. Columb's House, Kells, access is gained to the overcroft, which is 6 ft. high, by a square ope in the crown of the arch at the west end.

As St. Kevin's, Glendalough, has been dealt with by Mr. Deane, perhaps I should describe it here with a little more minuteness. It has been the subject of change and addition, as we will see in many other cases further on.

Originally it appears to have been a rectangular chamber, 22 ft. 7 in. by 14 ft. 10 in., clear of walls, which were 3 ft. 7 in. thick; the height to eaves 11 ft.; with a door in the west gable, square-headed; the mortices in the projecting lintel for securing the door can still be traced. A window in the east gable had the lower part cut away to form the chancel arch, when that addition was made. The vault is semicircular, of rubble work. The foundations of the chancel can still be traced. The roof appears to have been of stone, and of similar pitch to that of the original oratory: the sacrists still remains (see Brash, pl. vi.). The chancel was in existence in 1772. The turret on the east end gable is an evident addition, and in imitation of the great tower near. The names given to these oratories show that they were also dwellings—the bed, or resting place, of the saint whose name they bear. A glance at the plate in Lord Dunraven's book shows how small these buildings were; some have had chancels added, and are otherwise changed, as we can still very distinctly make out. A contemplation of these seems to point to the fact that the progress of

Christianity was slow, and the skill displayed in their construction proves that the people appealed to by the early teachers, were of a more advanced civilization than would be admitted by such as make the ninth and twelfth centuries the commencement of our stone structures. It is evident that our masonic skill owes little either to Dane or Norman. You will remember that St. Kevin is reported to have been born in 498, and to have settled at Glendalough in 540; and that instead of enlarging churches, as afterwards became usual, they appear to have multiplied. A short list given by Mr. Brash makes this apparent. The chancels seem in every case to have been additions. St. Flannan's, Killaloe (Brash, pl. vi.), may also be looked on as an ordinary type; a chancel appears to have been added; the chancel arch is narrow. The doorway may have been later than the tenth century.

It is suggested that a church was erected about the middle of the seventh century. In the tenth or eleventh century the chancel was added. This is one of the churches said to have been erected (properly repaired or re-edified) by King Brian. Buildings such as we have been considering bring us down to the ninth century, and are included by Mr. Brash under the title of "Transition Churches." He names the next "The First Transition Period." While little is known in England of what has been called "Saxon Architecture," and in France of that preceding the Norman, in Ireland the series of examples seems to have been exemplified. The smaller buildings have not been blotted out by the more imposing. The Danish inroad into this country commenced in 795, and continued until 1014—the date of their defeat at Clontarf. Brian became possessed of the throne of North Munster in 976; and our annals are filled with descriptions of the changes which he effected in the social state. It is pointed out that all through the Danish inroads architecture was slowly but steadily advancing; the churches increased in size; there is progress through the semicircular-headed window to the similar change in the doorway; the inclined jambs, however, remain. (As respects windows, see Brash, pls. vii. and viii.)

You will recollect that the Norman influence commenced in 1152, and that it is represented that the relations between the Saxon Church and the Irish were interrupted, through jealousy and other causes, in 664. From the sixth to the eleventh centuries Irish missionaries were to be found in every country of Europe. They founded religious houses in France and Belgium; and an Irishman was Bishop of Saltzburg in 756; another, a bishop in Spain early in the eighth century. Our countrymen found their way to Rome and to Byzantium. This seems to have exercised an independent influence upon Irish art. All antiquaries recognise such an influence as having been quite independent of that which subsequently came through England; and the peculiar character of our early ornamentation in our manuscripts and in our carving amply confirms this view. Under the great Tumulus at New Grange (pl. ix.); on the stones at the entrance, and also on that of the crypt and scrolls; rectangular panels, divided by diagonal lines; chevrons, concentric circles and other forms—evidently the germs of the ornament subsequently displayed in our illuminated MSS.

Sir Digby Wyatt thinks that Scotland, Wales, Cornwall, the North of England, and even Scandinavia, shew the influence of this system of ornament; and some of the most celebrated MSS. in Europe emanated from the Irish school. This has also been the opinion of others, who, like Sir Digby, have devoted no small attention to this branch of art. Our people have ever held the tradition that they came from the far East, and the race seems to have developed tastes akin to those which in Egypt (as shewn by Mr. Knight) mark the earliest MSS. Our crosses, the sculptured stones of Scotland, and the Runic crosses of the Isle of Man, may be examined as specimens of an analogous sys-

\* "The Ecclesiastical Architecture of Ireland, to the Close of the Twelfth Century," accompanied by Interesting Historical and Antiquarian Notices of Numerous Ancient Remains of that Period." By the late Richard R. Brash, Architect, M.R.I.A., F.S.A. Scot. Dublin: W. B. Kelly.



tem of ornament, which shew a common source. The question of ornament leads us naturally to the next period—that known as “The Romanesque.” It is supposed that, owing to the causes noted as affecting the question of ornament, intercourse with Italy, &c., may have introduced features of the Lombardic style into this country as early as the tenth century, before the Norman style became prevalent in France. It may be taken, however, that the Romanesque was not fully developed until the eleventh and twelfth centuries. The doorway of the church on White Island, Lough Erne (Brash, pl. x.) shews the association of the converging jambs with some of the new forms, the interlocking masonry, and the interlacing ornaments on the capitals. The Church of the Monastery of Glendalough, known as the Priory of St. Saviour, is also peculiar; there are two square recesses in the south wall, and one on the north, but no evidence of a piscina. The church appears to have been stone-roofed. In 1770 it is noted there was a stone bench at the east end from wall to wall, 1ft. 8in. broad, and 2ft. in front of it; an isolated stone altar, 5ft. by 2ft. 11in. broad, and 4ft. high. The capitals of the columns show human heads, the hair forming interlaced patterns, (see Brash, pl. xii.); other capitals had a fretwork (fig. 2). The bases were also carved (figs. 3 and 4). The arch stones and jambs of windows are also illustrated (figs. 5 and 6). These details differ from those common in Normandy and England. The Round Tower of Timahoe, Queen’s County, has a remarkable Romanesque doorway, and the characteristic ornaments (figs. 1 and 2).

Mr. Brash contrasts the doorway here with that at Kildare. He thinks the latter an insertion taken from another position. The Tower at Timahoe seems to retain the limestone base of the ancient structure, the rebuilding to have been done with softer material, and with more careful workmanship. Later still is the upper parts, which were also rebuilt, and the cap replaced in limestone. A handsome church would seem to have been erected in proximity to the tower, which became a belfry, and, to make the details of the building correspond, the more elaborate doorway was introduced; the windows remain unaltered, probably because they were not so easily reached. Perhaps you remember that Petrie’s argument was that, owing to the prominent and independent position of Ireland during the sixth, seventh, eighth, and ninth centuries, coupled with the number of independent petty lordships of which she was composed, she was enabled to maintain independence, although limited, examples of her own art; that the round form of tower contrasts with the Norman square; and that the ornamental details were national and consistent. At Temple-na-Hue, Ardfer, County Kerry (Brash, pl. xiii.), you find columns at the quoins of the nave with human heads. The rings of the chancel arch are enriched, but plain at the springing. The carved eave string is also peculiar. It is surmised that this was originally the parent church, which became too small, and a large one was built, and that this also gave place to the thirteenth century cathedral, which will be referred to hereafter as under Mr. Deane’s care.

The Cathedral of Clonfert may be also classed with the buildings of this period. It consisted of a nave, with a west tower, a chancel and transepts nearly at the centre of the nave, and a sacristy at the north side of the chancel. The entrance was under the tower, which is rectangular, and with an embattled parapet. The east window is given in Brash, pl. xv.

Tuam Cathedral (rebuilt by Mr. Deane), appears also to belong to this period; its date probably late in the eleventh, or early in the twelfth century. The classic forms are peculiar. The chancel arch and east window, I believe, remain but they have been much mutilated.

St. Cronan’s, Roscrea, is another church worth reviewing. The wall gable only is standing. It dates from the early part of the twelfth century. The nave must have

been 34ft. 6in. wide. The height to the damaged top of the belfry is 43ft.; the porch projects 2ft. 8in., and has a high-pitched gable, with human heads at corbels, to the barge coping. The arches are enriched, and the tympanum bears a figure of St. Cronan in low relief. It has the projection of the side walls, and is pancelled, as shewn in Brash, pl. xix. (See also the doorway of Donoughmore, near Clonmel, pl. 20.)

As regards Clonmacnoise (pl. xxv.) we have notices in the Annals of the Four Masters, under dates from A. D. 558 to the end of the twelfth century. It seems to have been nine times burned between 719 and 1179, and sixteen times plundered between 841 and 1178; at 1129 is noted the robbery of sacred vessels, &c., and the following year their recovery from the possession of a Dane. Temple Finghin (see pls. xxvi., xxvii., and xxviii., Brash) is thus described:—The church consists of a nave, 28ft. 10in. by 14ft. 6in. wide in clear of walls, which are 2ft. 9in. thick at flanks, and 3ft. 3in. at gable; the present height is 1ft. to 3ft. The entrance was in the south-west angle (see the capitals, pl. 27). The chancel arch was originally of three orders. The present arch seems to date from the seventeenth century. There is an opo in the east gable, and in the south wall a piscina, with a grooved basin of mediæval date. The Round Tower is 56ft. high, the caps peculiar (see pl. 27). There is a doorway on the north side entering into the chancel from the tower. All the windows in the tower face the south. There are no attic windows. Mr. Brash disagrees with Petrie as to the simultaneous erection of the church and tower. The courses of masonry do not correspond. They are not bonded but toothed; a chase has been cut in the wall of the tower, and the roof let in; an attempt has been made to remove the internal projection of the tower at the angle of the nave, which proving dangerous to the tower the cutting was fashioned into an angle pillar (see pl. 26). The history of the buildings is suggested to have been this. The tower is the oldest. The chancel seems to be of the eighth or ninth century. When the nave was built it was proposed to utilise the tower, and to make the lower storey a sacristy, for which purpose they seem to have cut away the internal face 7 ft. for a weight of 7 ft., and also the jambs and arch of window and door.

## QUERIES.

BY A CITIZEN.

I WANT to know when the last deputation from Cork-hill went to London to dance attendance—who paid the piper, and to what tune?

I want to know why the Government Auditor does not ask to see the scribbling diaries of some of the officials, to see how far they tally with the “cooked accounts”?

I want to know was it that “busy-body,” McEvoy, that spoiled the Corporation broth, or some other “broth of a boy”?

I want to know how many immaculate aldermen and T.C.’s secured, within the last five years or so, leases of city property; and how many more are promised renewals or reversions, if they keep their mouths shut?

I want to know is the “middleman” tyrannic dodge an honest expression of corporate feeling, a dodge presumptive, or *de facto*?

I want to know are some rates and dues collected at the expense of 17s. 6d. in the pound, and if the collectors are seeking an increase of salary for their efficiency and valuable services?

I want to know, if “a wink is as good as a nod to a blind horse,” why do not the rate-payers cut the bearing rein and exhibit the rat’s terror at large?

I want to know what is the distance from the centre of Essex Bridge (beg pardon, Grattan) to the end of the Main Drainage scheme?

I want to know how many members of the Corporation are, contrary to law, deriving a benefit by contracts, jobs, commissions, and otherwise, through their connection with the Town Council, if not directly, at least indirectly?

I want to know when is the “Riding of the Franchises” to be revived, and the city “bounds” to be beaten; and if the intended beating takes place, it will be likely to “Bang Banagher,” &c.?

I want to know, if a corporation be considered to have no honour, soul, or body, and, therefore, can be kicked, and often deserves to be kicked in its collective capacity, would it not be an improvement on the old system to kick several of the members individually, according to their deserts?

I want to know which are the greater nuisances: the obstructions in our public thoroughfares, or the “obstructives” in council who rule over these obstructions?

I want to know what are the exact differences between the geological strata and surface accumulations of Black Pitts, Stoneybatter, WhiteHorse-yard, BlackHall-row, Cutpurse-row, Murdering-lane, and other moral and sanitary quarters of old renown?

I want to know at what date did Usher’s Island cease to be surrounded with fresh water, and Mud Island with salt water; and if these original slob lands were reclaimed by city scavenger, or by a process of spontaneous upheavals?

## NEW BRIDGES OVER THE LIFFEY.

CARLISLE BRIDGE.

THE tenders for the additions to this bridge are to be sent in on the 22nd instant to the secretary of the Port and Docks Board. It is proposed to lower and alter the present approaches; to build a new superstructure to correspond with width of Sackville-street; to divide the traffic across bridge by a central footway, on which will be placed three ornamental five-light lamps “in the highest style of Parisian art.” The footways are to be of best Limmer asphalt laid in two thicknesses, with granite curbs. The entire work is to be completed within two and a-half years from date of contract, under penalty of £30 per week for every week beyond that time. The specification provides that at no time during the progress of the works shall the thoroughfares along the quays, across the bridge, or along or across the approaches, be stopped; and also, that whilst the approaches are being altered, the temporary interference with the traffic shall be but partial and as brief as possible. The boring tools are to be of the best description, made by Messrs. Booth, or other maker approved by the engineer. After the completion of the foundations, these tools are to become the property of the Port and Docks Board, and are to be handed over in good order to the charge of the storekeeper. We give an elevation of bridge in this number.

THE SWING BRIDGE.

The bridge designed by Mr. B. B. Stoney, to be erected to the eastward of Carlisle Bridge, will connect Beresford-place with East George’s-street. Our lithograph illustration fully explains the character of the bridge. The specifications for both bridges are given in a condensed form by our contemporary the *Engineer*, and to them we beg to refer our readers. We have already in this journal expressed an opinion that a site further down the river would have been preferable on the score of general convenience, as well as to more readily connect the railway termini on both sides.



## LECTURES ON ARCHITECTURE.\*

(Continued from page 131.)

## DOMESTIC ARCHITECTURE, THIRTEENTH CENTURY.

IN my last lecture I dealt with the question of the domestic architecture of the twelfth century, the style of which we may, for convenience, call Saxon and Norman. We saw that it was marked by great simplicity of general arrangement, although not without care for architectural effect, and that the latter might even lay some claim to magnificence, particularly towards the close of the century. I propose now to pass onwards to the succeeding epoch of Gothic architecture, —the golden age of the style, namely, the thirteenth century.

We shall not find the transition rapid or startling; the architectural glories of the thirteenth century grew naturally, and by degrees, from the preceding styles, and the old Norman work was of too solid a description to be easily destroyed. Moreover, the time at the commencement of the period was not favourable to the pursuit of the arts of peace. If, in the clash of arms, laws are silent, the same is also especially true in respect of the quiet progress of architecture. Without security, men will not do their best, and they can have little care for beauty in architecture when the first necessity is to procure safety for their lives and goods. Castles, therefore, and not houses, were the principal work of the unsettled times of King John. Not that ever many of these important works were undertaken *de novo*, but old fortifications were repaired and strengthened, and new defences were devised for existing structures.

It was by slow degrees that the great men of the day began to settle themselves in the country by building their manor-houses, and at first, even these were constructed so as to be capable of defence, in case of need. In the days of Henry III. and Edward I., architecture revived, and to the time of the former we ascribe that style of Pointed architecture, popularly known as Early English.

Before going into any detail respecting the forms of buildings which now came into use, we may perhaps dwell with advantage on some of the social characteristics of the country, at this time, for by such circumstances, domestic architecture is naturally influenced. The Norman conquerors had, in some measure, assimilated with the Saxons. Land, at first held by them in right of conquest, became gradually subdivided, and tenancies arose, with sufficient security of tenure to encourage building.

Strict laws preserved indeed huge tracts of country, and hindered its settled development. An immense portion of the land was consequently covered with wood, and formed the sanctuary for criminals and lawless men of all descriptions, who lived by the plunder of travellers, and on the game which existed in abundance. Wolves and wild cattle were found in the forests, and other desolate tracts. Travelling from place to place was restricted and dangerous, and there were few who ventured to live apart from their fellow men unless they could command a following, strong enough to secure their houses from violence. Free and safe communication is one of the first signs of advancing civilisation, and we know that it has not yet been perfectly attained even in all modern European States. In the England of olden times, the roads passed through extensive forests, and none were without their history of wrong and robbery.

The Norman forest laws were of a very oppressive character, and many lives were sacrificed for what we should consider venial faults. The forests were strictly preserved for Royal use, and the day was not come when it was recognised that the people had their rights as well as the Crown. To interfere with the sport of the king was death, and the laws which preserved the forests for his use were most severe. It is a curious

reflection that circumstances so change in the progress of time, that these laws (or the scanty remnants of them, which have subsisted until to-day) have lately been successfully involved in the interest of the people, against whom they were originally directed. In our more artificial state of society, the preservation of open spaces, particularly near to large towns, has become a public question of vast importance, and in recent proceedings in respect of Epping Forest, the old forest laws of the Normans have been turned to the advantage of those who desire its preservation, by the Corporation of the City of London, who have stood forward as defenders of public rights, in a manner very much to their honour.

Whatever value we now, however, ascribe to these forests, it is certain that in early days they were a serious danger to the people. Travelling was impeded, so that even the main roads near to London,—as, for example, that to St. Alban's,—were impassable in safety, without an armed escort. To meet this danger, orders were given to widen all main roads, and the bushes and woods were cut down and cleared away for 200 ft. on each side of the road. If any proprietor neglected to do this, and a murder or robbery occurred, such proprietor was to be considered responsible, even to the extent of felony.

The old Roman roads, as Watling-street, had determined the main lines of communication, and these passed, for the most part, through forests. To the clearance laws above referred to we owe the wide and ample roads in many parts of the country, with their grass sides and ample space, now too often disappearing under repeated encroachments. Agriculture is fast effacing these pleasing features. Hedges are grubbed up and palings advanced, corners are enclosed, and roads are narrowed, till they become mere passages between walls and fences. For all this, there may be economical reasons, but the lover of country beauty cannot but deplore the change. In the thirteenth century width of roads was a necessity, and we may think of this with regret, if it be indeed a necessity of the nineteenth century to narrow them.

The clergy were at the head of most of the improvements of former times. They not only held land to a great extent, through the great ecclesiastical corporations, but from the nature of their duties they were frequent travellers. To them the great fen countries in Lincolnshire, Cambridgeshire, &c., owe their first improvements. Their tenants enjoyed an immunity from the oppression and the caprice, which often pressed hardly on those who held land from individuals, and the ecclesiastical estates were consequently, as a rule, well managed and improving. Tolls were allowed to be levied for the repairs of roads, and also for the erection of walls of defence round the principal towns. A watch was kept on these walls, and a curfew bell generally rang about nine in the evening, after which time all good citizens were expected to be at home. Drinking-houses were closed at the same hour, and lodgers and strangers were obliged to give security for their good behaviour.

The Jews had obtained great wealth, and with it power and consideration, but they were, nevertheless exposed to fierce hatreds. It was difficult for a fanatical and prejudiced population to understand that their riches were acquired by patient toil, self-denial, and ability. A simpler and more acceptable explanation was found by the ascription to them of sorceries and illicit arts. Their houses were, as has been already noticed in the case of the Jew's House at Lincoln, remarkable for importance, and we may suppose comfort; but this circumstance, doubtless, only added to the jealousy with which they were regarded. The Jews were nominally expelled from England by thirteenth-century bigotry, and carried for a time their riches and their talents to benefit other countries. The populations of our English towns were, at this time, small in number, and were sensibly reduced by the expulsion

of the Jews. Certain families and localities became identified with particular industries. In this manner the Jews connected themselves with the goldsmith's art, the development of which was retarded by their banishment.

That which has been called the "organisation of labour" in modern times, was understood and practised in the Middle Ages, although not altogether in the spirit displayed by it in our days. Each department of trade became a corporation or guild. Goldsmiths, carpenters, masons, smiths, and others, all had their separate societies and special rules. Apprentices were bound by the law, as well as the custom, of their craft. They were obliged to learn, and until they had proved their ability they could not work for themselves as regular tradesmen.

You are aware how the tradition of these things lingers among us still in the great City companies. The day for regulating trade in the improving spirit of the Middle Ages is gone, some of us may fear for ever, as we see the quaint excellences of the older work overborne by the fierce competition of the day, for multiplicity and cheapness. The companies, however, will stand out as landmarks. Some of them, at least, as the "Goldsmiths," have still connexion with the trade, and discharge certain public responsibilities, and I cannot but hope that a time may come when they may see their way to realise large schemes of public usefulness, in reference to trades connected with art.

We need not trouble ourselves here with trade as far as *quantity* is concerned; that will always depend on the state of the world's markets, and our machinists are ever turning their attention to cheapness and incessant multiplication. What we do desiderate is *quality*. We wish to see art brought to bear, indeed, on common objects, made by hundreds and thousands; but in order that this may be done, there must be rewards for the patient workman, who will put his best work into all he does, and who will be proud of the quality, rather than the quantity, of the results. This is not the spirit which commands success in the close competition and higgling of the commercial market. It is one which needs the fostering care of intelligent and wise patrons, who are aware of the difficulties of the case, and are not to be led away by the capricious whims of fashion. To perform such honourable duties, the great livery companies of London appear to me to have special aptitudes. They have ample means, they have machinery which could easily be put into action, they have the steadiness and importance which are the results of their long-continued corporate existence. They are always ready in the cause of charity, and they have never been charged with forgetting the virtue of hospitality.

May we not appeal to them in the cause of art? Individual patrons, however willing, can do little, and must have but a fleeting influence; but I cannot conceive any object to which a portion of the great influence and resources of the city companies can be more usefully directed in the public interest than that of fostering the arts of their time, more particularly with reference to the special trades with which they are assumed to be connected, but from which they are too often divorced.

I believe great public advantages might be found to spring from a renewal of old ties. We live in times when the right of association has been definitely recognised, and when it is consequently spreading and gaining power from day to day, and it would, I think, be a clear gain to the community if we could point to trade companies, which, while upholding the dignity of commerce, would dwell upon the *duties*, as well as on the *privileges*, of labour, which would encourage art and reward excellence.

We know little of such influence now, and when we speak of trades and guilds which prescribe working rules, settle wages, and the like, we naturally think only of the modern trade union, by means of which the

\* By Professor Barry. Third lecture. Delivered at the Royal Academy on Monday, March 12th.



workmen gain in power by association for common objects. Scarcely a day passes that we are not called on to notice the action of these societies, and not always it must be said, can we approve of them. No one now-a-days would contest the right of working men to form themselves into societies for the protection of their interests; but as these societies become matters of public importance, they must expect to be subjected to free criticism, and the people at large may ask the question, "Do they conduce to the public good?" All must sympathise with the honest efforts of a class to raise itself in the social scale, but we cannot believe that the right manner of seeking this laudable end is to damp the ardour of individuals; to discourage special skill; and to dream of an equality which has never existed, and can never be called into being.

The guilds of old were as careful of the interests of their men as the trade unions among ourselves can be; but the rare beauty and excellence of their work suffice to show the spirit of their rules. An apprentice had really to learn his trade, and to excel in it. He then advanced in its ranks, and ultimately became the master workman. In that capacity he dealt directly with his employer. There were no great contractors or middle-men. Huge and rapid undertakings were unknown. There was time and opportunity for the workman to take pride in his work. A rich man would take his gold to the goldsmith, who would fashion it for him, and have it guaranteed by the mark of his company. A monastery, or a great lord, who desired to build, would fell his timber, and quarry his stone. He would then seek the master workman, who would find the labour and trade skill. Work was not so plentiful that his subordinates could lightly quarrel with him, and strikes, at least on a large scale, were not as yet a feature in the annals of industrial art.

It cannot be disguised that artists have much reason to look back at these things with wistful eyes. Our workmen pride themselves, and, I believe, on the whole, justly, on their skill and good sense; but we have, nevertheless, but too often to deplore the rough and careless manner of work which has become the ordinary custom of our time. The architect is the true friend of the workman, anxious for his well-being, glad to welcome his social rise, and without opposing interests. It is not his place, therefore, to utter smooth things, but to tell the truth, and in this spirit to point to the decadence of artist-like spirit and thorough execution in the common work of the day. It may be well that trade unions should busy themselves with the wages and privileges of their supporters, but the friends of our workmen would feel more hopeful if they heard more from those societies of the duties expected from them; if they found them the nurseries and loving mother of genius; if they saw that the obligation was recognised that to earn justly a "*fair day's wage*" there should be a "*fair day's work*."

To return now to the question immediately before us. We shall find that timber was still largely used in private houses, stone being then, as now, a luxury of the wealthy. A wooden hut was for a long time the type of domestic buildings; and excepting where more solid materials were rendered necessary for safety in disturbed parts of the country, it was commonly employed for all the minor structures of the time. The great nobles, the archbishops, and abbots might, indeed, indulge a more costly taste, but lesser persons had to content themselves with wooden constructions. Brickwork was not yet common, and few early examples of it remain.

By degrees, the various materials were mixed in the construction of the same building, so that the upper part of the house would be of wood, and the lower part of stone. In such cases, the latter was contracted, as much as possible, from motives of economy, and the upper stories were projected over the substructure. It was easy to

make the floor-beams longer than the rooms below them, so that their ends should project. Space was therefore gained in this way, and the lower part of the house was sheltered, and kept warm and dry. The same mode of building is followed in Switzerland and other mountainous countries at the present day, and you have doubtless often been pleased with the picturesque arrangement of outside stairs, balconies, and overhanging galleries, which such a method of building favours. We find it in some of the old inns in this country, and not long since Southwark could boast several good specimens of the class, now I fear gone, with other relics of a similar kind. An enormous number of such structures were swept away by the Great Fire of London.

The spaces between the wooden framework of the walls of timber houses were filled in with a plaster, of lime, sand, or mud, mixed with straw to ensure its keeping together. This was generally laid on laths, after the usual manner. Many wooden manor-houses built in this way are very picturesque, and some counties still abound with them. The roofs were of high pitch, and the chimney often took the form of a central shaft, or cluster of shafts, thus avoiding danger from fire to the wooden walls, and concentrating the heat where it was most wanted, namely, in the middle of the house. I cannot pass from the mention of this arrangement without noticing with regret a too common habit of designing chimneys in the external walls, a plan which often sacrifices the comfort of the inhabitants to an assumed necessity for picturesque design. In good houses, with thick walls, and where solidity and substantial construction have been more esteemed than cheapness, the architect may fairly employ a mode of design which he may think adds piquancy to his elevation, and often convenience to the plan; but, in other cases, external chimney shafts are not to be commended, as I am sure many an occupant of a country parsonage, or villa, in the building of which economy has reigned supreme, has had occasion to discover.

In the manor-houses of the thirteenth century, the hall maintained the place which it had hitherto held. Here, the lord received his tenants and neighbours, here they feasted, here also, they often slept; and around the hall gradually arose the more complicated arrangements of later times. The mode of life in the manor-houses differed only in degree from that of the king's palace, and in Westminster Hall we have a splendid example of an "*aula regis*," or royal hall. The hall was surrounded by a spacious enclosure, in which were the kitchens and other offices. On great occasions, as at coronations, the space was nearly filled by temporary erections, built to accommodate the overflowing number of the visitors. The hospitality of the time forbade that any should be sent away empty, even if there had been inns for them to go to, which was not the case. If the great hall were not sufficient, other smaller halls were erected around it, and kitchens built for their especial service. Westminster Hall had not, of course, its present appearance in those early days. It was first built by William Rufus, and must have been, even then, a building of great magnificence, as is shown by the remains of Norman architecture now built in the thickness of its massive walls. These remains were seen to advantage when the great archway leading to the Houses of Parliament was pierced in the southern end wall of the Hall. The great enclosures which surrounded the hall were necessary for defence, and visitors with their retinue, horses, and servants, had all to be provided for. This was no slight matter in days when a great nobleman would take in his train 150 to 200 horses, with the necessary attendants, besides an armed escort.

Although we now begin to find traces of a desire for more comfort than was sought in previous times, it was only by slow degrees that matters which we think essential were

adequately attended to. Thus glass windows were for a long period rare, and costly; so that even in large houses the upper lights were closed with wooden shutters, after the ancient manner. The art of glass-making was not unknown to the Romans, as I pointed out to you when describing the houses at Pompeii. It never was lost in Italy, and was freely used there before it became common in this country. During the recent modern revival of tastes in Italian art we have seen a revival of glass manufacture in its ancient seat of Murano, whence came the glass used in many of the chief buildings of Italian Medieval days. In Britain the Romans may possibly have imported glass in small quantities, and used it in a very sparing way; but it is obviously unlikely that this could have been done on any large scale, considering the difficulties of transport and the nature of the material.

These circumstances will account for the scarcity of glass in this country in the thirteenth century. The French, and the inhabitants of the Low Countries, or Flemings, seem to have had greater skill than our ancestors in making glass, for it became a regular article of trade with those countries, as well as with Venice, the latter place being chiefly resorted to for drinking-cups, and vessels of an ornamental character. Window-glass came chiefly from the Flemings, with whom extensive commercial dealings had sprung up in connexion with the wool trade. The latter was a very important industry in this country, and our merchants sent wool to Flanders in large quantities, and took as part payment window-glass in exchange. Among the trades of the time we find occasional notice of that of the "*glazier*," but there is no mention of that of the glass-maker.

Such being the state of the market for this important item of the builders' materials, and the difficulty of procuring it, glass made its influence felt but slowly in domestic buildings. The churches, the royal palaces, and the great religious houses, had to be supplied, before the manor-houses of the gentry and less important buildings could have their share in the improvement. Wooden shutters were, therefore, still common, and cases exist where the stone mullion, which divides the opening into two lights, is pierced with holes, through which the bars were passed to secure the shutters at night. It may easily be supposed that such shutters did not close the windows very thoroughly, and that draughts of cold air abounded. Even the queen of Henry III. was not exempt, it would seem, from this inconvenience; for there is a record of an order from the king directing glass to be placed in the window of the queen's wardrobe in the Tower of London, instead of wood as then existing, "so that that chamber might not be so windy."

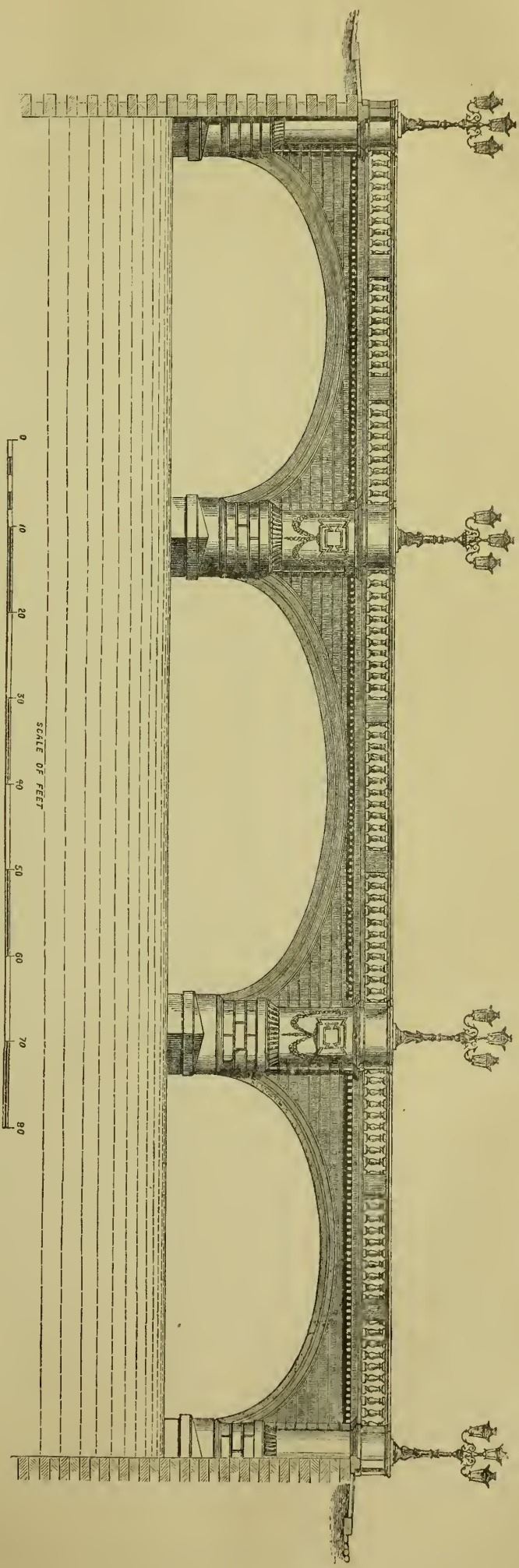
The walls of this period being usually thick, there was ample opportunity for placing shutters either within, in the thickness of the wall, or outside. Both methods were common. In the interior, as I have before pointed out in the case of earlier examples, the window-sill was commonly formed with a seat, sometimes a plain bench of stone, and at other times more elaborately arranged with returned ends and mouldings. This treatment of the sill is almost universal in dwelling-houses, and serves as a distinguishing mark between ecclesiastical and domestic work.

The ordinary type of window was the two-light form, common with the Normans, and divided, as in that case, by a column or shaft. The roofs were covered with stone, tiles, and slate, and still occasionally with thatch or shingles. Crest ornaments began to appear on ridges, and hip-knobs and finials were also seen. Stone gutters, sometimes covered with lead, carried the water to projecting spouts, which developed into the quaintly-covered gargoyle.

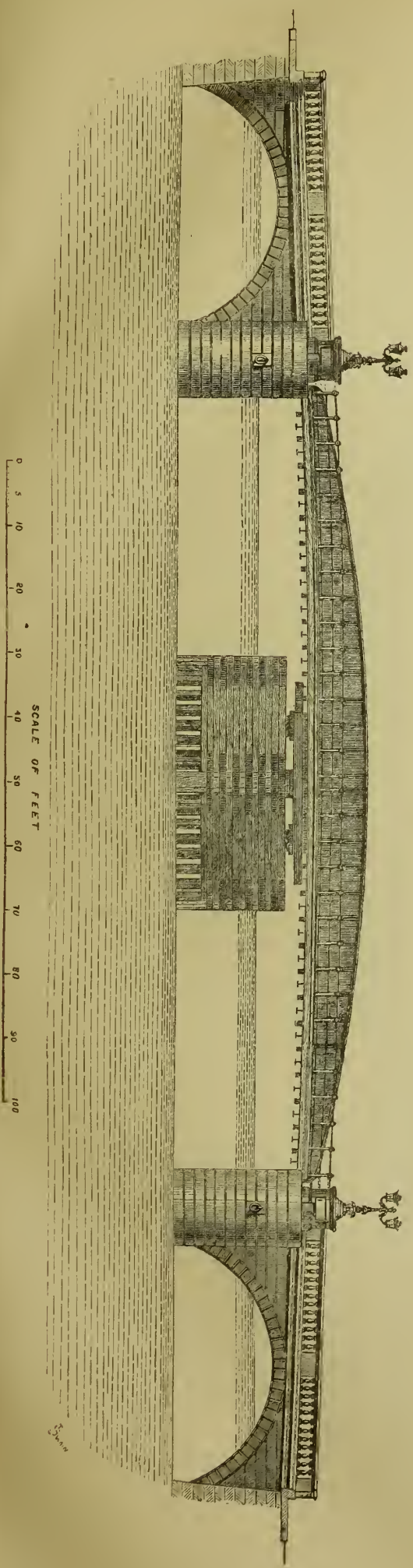
In the interior of their houses, the thirteenth century architects soon turned their attention to the fire-places. These, however, were far from universal, as the old custom still remained of having a hearth in



ELEVATION OF NEW CARLISLE BRIDGE



NEW SWING BRIDGE EAST OF CARLISLE BRIDGE.





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the middle of the apartment, with openings in the roof over it for the passage of smoke. It must be remembered, in estimating the inconvenience of this practice, that the fuel used was wood, and not coal, with its black and blinding smoke. The arrangement of a central fire was general in kitchens, and was often used in halls and other large rooms. As, however, the convenience of a regular chimney became apparent, we find great attention paid to the design of the fire-places. These are often richly carved and ornamented, and the practice continued until the latest times of Gothic architecture. After the latter had become merged in the Renaissance, the grandeur of the chimney-pieces still increased, and some very handsome examples are found in the Elizabethan and Jacobean mansions of England, and also in France and Belgium.

There is something hospitable-looking in these great recesses, which gives a significance to the phrase of welcoming to the "hearth." In the architecture of the future, there may be a change, but the artist has little reason to wish for it. At the same time, we cannot shut our eyes to the fact that wasteful fire-places cannot always be a feature in our domestic economy, more particularly in respect of the homes of the poor. It has been urged that our pleasure in seeing a fire in our rooms is chiefly due to the inefficient warming and ventilation of the latter. If a man feels warm, he does not think of a fire, or expect to see one. With November chills, we look at our cold grates, and wish to see a bright fire burning in them. We say it is cheerful-looking, and pleasant; but the very same object would be disgusting to us in the dog-days. We approach the fire, and gather round the hearth, because we are cold; and a chief reason of this is, that a large portion of the heat produced by the fire goes up the chimney, and the rest is so partially distributed, that one part of our rooms is as much too hot as others are too cold. Owing to the Englishman's affection for an open fire, and also to his conservative instincts in matters of habit, it is not probable that fire-places will soon disappear from the homes of those who can afford to indulge their tastes; but as our coal supplies approach more nearly to exhaustion, and fuel becomes dearer and dearer, it may well happen that architects will be forced to turn their attention to the substitution of other arrangements for the open fireplaces, which have been handed down to us from our ancestors. There is no doubt, however, that in dispensing with them we shall lose a very striking and beautiful feature of architecture, and we can only hope that the change, if it come to pass, may be attended with compensations in the way of increased cleanliness, brightness, and comfort.

In continuing our architectural retrospect, it must be remembered that we have not yet arrived at a time when security against external danger could be relied on, and many details of the castellated architecture of the preceding century were still common. Such are the battlemented or crenellated walls of enclosures, and also parapets, and the external flights of steps by which the upper stories were often approached. Staircases, as we understand them, came into general use at a later period. The interior walls were commonly plastered and whitewashed. Sometimes a simple decoration might be added, and the custom of lining the walls with wainscoting arose, although this was very sparingly used at first, in consequence, doubtless, of its great expense.

(To be continued.)

**TURKISH BATHS IN PRIVATE HOUSES.**—A method has recently been patented for providing Turkish baths in private houses. The apparatus is simply a sort of portable closet, within which the patient sits, his head being kept outside through an opening in the top. The heat is supplied by a gas or oil lamp. This is stated to answer all the purposes of an ordinary Turkish bath, and to be equally effectual.

## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

THE name of Charles Macklin has often occurred throughout our notes; nor could it be otherwise, for this more than centenarian Irish actor and dramatic author lived from the beginning of the last decade of one century till nearly the close of another. Macklin's life, from his cradle to his grave, was one of the most eventful in dramatic annals. Born into the world in the year of the Battle of the Boyne, and living almost till the eve of the Rebellion of 1798, for it was only in the year preceding the latter date the great aged actor passed away. A volume would be necessary to deal with the story of this actor's life, and his theatrical associations with the Irish and English stage, including his other pursuits apart. Charles Macklin, or Mac Loughlin—for the latter was his proper name—was a native of Westmeath, and received his early education in this country, and a portion of it in Dublin, at Island Bridge, at the hands of a Scotch schoolmaster, who he had reason to remember for his undue harshness, and whom Macklin afterwards made the world remember in one of his dramatic personations of Scotch character. Young Macklin's boyhood and youth as a young comedian, or droll, was full of vicissitudes, before he made headway. He went over to England early in the eighteenth century, performing in several strolling companies, halls, and booths; and about 1725 became a performer in Lincoln's-Inn-Fields. It is said his merit became first known here in a small character in Fielding's "Coffee-house Politician." About 1735 Macklin had the misfortune, in consequence of a sudden act of passion, to occasion the death of Mr. Hallam, a brother actor, for which he stood his trial, and was honourably acquitted, it having been proved that the affair was purely accidental.

Macklin continued to act for several years with increasing success, till 1753, when for a time he took leave of the stage, and opened a coffee-house in Covent Garden, where he established a disputing or debating club. This project did not succeed; and after a while the actor returned again to the stage, and continued an active performer until a short time before his death. Many actors and authors have left us their estimate of the abilities of Macklin; and, though they differ in parts, they agree as a whole that he was a great representative actor. Most of those who have written about Macklin treat of his later life instead of his earlier; and their impressions of the man are but partial or incomplete pictures. Dibdin thus alludes to our actor—"Macklin, whose writing was as harsh and hard as his conduct, was rude and dogmatic, who, though he did not produce many pieces, contrived to make one answer the purpose of many; whose strange peculiarities made him a torment to himself and to everybody else, was, however, a useful, and sometimes, a great actor; and very far from an inferior author." Holcroft, the politician and actor, writes of Macklin that—"His mind was as rough and as durable as his body. His aspect and address confounded his inferiors, and his delight in making others fear and admire, gave him an aversion for the society of those who were his superiors." O'Keefe tells us that "Macklin was very tenacious, and properly so, of performers throwing in words of their own. Lee Lewis, one morning at Covent Garden, at the rehearsal of 'Love à la Mode,' in which he played Squire Groom, said something which he thought very smart. 'Hoy! hoy!' said Macklin, 'what's that?' 'Oh,' replied Lee Lewis, 'tis only a little of my nonsense.' 'Aye,' replied Macklin, 'but I think my nonsense is rather better than yours; so keep to that, if you please, sir.'"

Leigh Hunt, whose criticisms are generally correct and discriminating, says:—"Macklin was celebrated in Shylock and in other sarcastic parts, particularly that of Sir

Archy in his comedy 'Love à la Mode.' We took him to be one of those actors whose performances are confined to the reflection of their own personal peculiarities. The merits of Shuter, Edwin, Quick, and others who succeeded one another as buffoons, were perhaps a good deal of this sort, but pleasant humours are rare and acceptable. Macklin was a clever satirist in his writings, and embroiled himself, not so cleverly, with a variety of his acquaintances. He foolishly attempted to run down Garrick, and once in a sudden quarrel poked out a man's eye with his stick, and killed him, for which he narrowly escaped hanging. However, he was sorry for it, and he is spoken of by the stage historians as kind in his private relations and liberal of his purse."

During his life our actor was spoken of thus by a writer in the *Biographia Dramatica*:—"Mr. Macklin in his private character is a tender husband, a good father, and a steady friend. To his firmness and resolution in supporting the rights of his theatrical brethren, they have been relieved from a species of oppression to which they had been ignominiously subjected for many years, whenever the caprice or malice of their enemies chose to exert itself. We allude to the prosecution which he commenced and carried on against a set of insignificant beings who, calling themselves 'The Town,' used frequently to disturb the entertainments of the theatre, to the terror of the actors as well as to the annoyance and disgrace of the public."

It will be seen by what is stated above that Macklin succeeded in doing for the reform of the Stage in London to some extent what Sheridan to a much larger extent succeeded in doing in Dublin.

Frederick Reynolds remarks:—"I did not meet with this great original till he was in the winter of his life, but I have heard some contemporaries assert that to the manner he conjoined considerable portion of the matter of Dr. Johnson. On the truth or falsehood of this declaration I cannot pronounce; but of his Shylock, as I have seen it various times, I can venture boldly to assert that for identity of character, from the first scene to the last, probably as a performance it was never surpassed."

We are given the following picture of Macklin in the "Life of Mathews," at a time when the Irish actor had passed his hundredth year:—"At this time Charles Mathews sought an interview with the celebrated Charles Macklin, who had then attained his hundredth year and upwards. He had been recommended to recite to him, for the purpose of gaining the veteran's opinion and instruction; and, by going by appointment to the residence of the aged man in Tavistock-row, he found him ready to receive him. There was Macklin in his arm chair; and when the door was opened and the youth announced, he did not attempt to rise, nor indeed to take any notice of the stranger, but remained with an arm on either elbow of the chair he sat in, looking sour and severe at his expected pupil, who hesitated on the threshold and paused timidly, which occasioned the centenarian to call out 'Come nearer! What do you stand there for? You can't act in the gap of the door!' The young man approached. 'Well,' added Macklin, in a voice ill calculated to inspire confidence, 'now let me hear you; don't be afraid!' His crabbed austerity completely chilled the aspirant's ardour; however, mastering up all the confidence this harsh reception had left him, he began to declaim according to the approved rule of 'speech days.' Macklin, sitting like a stern judge waiting to pronounce sentence upon a criminal rather than laud a hero, soon interrupted the speech with a mock imitation of the novice's monotonous tones, barking out 'Bow, wow, wow, wow!'"

The following is an interesting and pathetic account of a scene which occurred when Macklin was acting Shylock, at the very advanced age of eighty-nine:—"The great excellence of the veteran Macklin drew considerable audiences whenever he appeared in

\* See ante.



Covent Garden Theatre; and he had been announced to perform his own *Shylock* on the 10th January, 1788, at the extraordinary age of eighty-nine. I went there to compare his performance with that of my friend Henderson, whose loss I ever still regret; and with some anxiety and much veneration secured a station in the pit, which none but the young should scuffle about, for it was much contested. You first saw the foot of the actor, and thus had his full expression and whole figure bearing upon your eye. . . . It was a little time before my introduction to Macklin, and I would not at that time miss a repetition of his triumph in the Jew. . . . Macklin got through the first act with spirit and vigour, and except to a very verbal critic, without material imperfection. In the second he became confused, and sensible of his confusion. With his usual manliness, and waiting for no admonition from others, he advanced to the front of the stage, and with a solemnity in his manner that became extremely touching, thus addressed the audience:—"Ladies and gentlemen, within these few hours I have been seized with a terror of mind I never in my life felt before; it has totally destroyed my corporeal as well as mental faculties. I must, therefore, request your patience this night—a request which an old man of eighty-nine years of age may hope is not unreasonable. Should it be granted, unless my health is totally re-established, you may depend upon it this will be the last night of my ever appearing before you in so ridiculous a situation." Thus dignified, even in his wreck, was that great man, whom Pope had immortalised by a compliment; and whose humanity Lord Mansfield had pronounced to be at least equal to his skill as an actor. He recovered with the general applause of the audience, and got through the play by great attention from the prompters and his assistant."

A still living writer, Percy Fitzgerald, thus depicts Macklin:—"A strange character—an Irishman of rough humour and ability, a good fives player, and a very promising actor. His appearance was very remarkable; a coarse face, marked not with 'lines' but what a brother actor with rude wit called 'cordage.'" He was struggling hard to get free of a very pronounced brogue, and having come to the stage with what was to English ears an uncouth name, and to English mouths an almost unpronounceable one, had changed it from McLoughlin to Mecklin, and later to Macklin. . . . He was a most striking and remarkable character, and one that stands out very distinctly during the whole course of his long career, which stretched over nearly ninety years. He was quarrelsome, overbearing, even savage; always either in revolt or conflict, full of genius and spirit that carried him through a hundred misfortunes." A greater than Charles Macklin in dramatic genius could scarcely have been less in temper, had he experienced what the Irishman experienced, saw, and suffered in his youth. He had tender chords however in his heart that could be touched, and were touched and responded in acts of thorough sympathy and practical generosity for his brethren of the profession and for others outside. He had his faults, to be sure, and few great actors of his age or any other but had had theirs. Strangers, and some of them very reluctantly, have done justice to his character and abilities; and possibly had he not been so very Irish in nature and origin which he always remained, notwithstanding his change of name and self-polish, he would during his life and since his death have been ranked higher and placed on a loftier pedestal by English dramatic critics and historians of the stage. We are sensible of his faults and failings, but we are also equally conscious of his merits, and the latter greatly outweigh the former. Macklin's greatest character was certainly *Shylock*, his performance of which drew from Pope the remarkable compliment already alluded to:—

"This is the Jew  
That Shakespeare drew."

Macklin was the author of ten plays, two of which, "*Love à la Mode*" and "*The Man of the World*," still retain their place upon the stage. The latter piece first appeared under the title of the "*True-born Scotchman*." Many anecdotes are current illustrative of Macklin's wit, but some of them, we opine, have been manufactured and accredited to him, as others have been to Swift. He had wit, however, and pungent sarcasm too, as the principal characters of his two most popular plays, Sir Archibald McSarcasm and Sir Pertinax MacSycophant, prove. The latter character is at presentably personated by the veteran actor, Mr. Phelps. Throughout his career Macklin made many professional visits to this country, playing repeatedly on the boards of the Dublin and provincial theatres, always receiving a warm welcome from all classes of his countrymen.

## ADVERSARIA HIBERNICA,

### LITERARY AND TECHNICAL.

TRADE customs and characteristics have often been written upon, but there are still many points relating to the habits, manners, and usages of ancient and modern craftsmen untouched. The working dress of mechanics of all trades, from the earliest time to the present, would afford an interesting study. Fashion in the ranks of our artisans has caused many changes of garb, as well as it has caused it in the apparel of private persons not following a mechanical or handicraft avocation. Shakespeare, in the opening act of his play of "*Julius Caesar*," presents us a scene in a street in Rome, a portion of which we will give here as a text by way of illustration to our remarks:—

"Enter Flavius, Marullus, and a rabble of Citizens."

Flav. Hence; home, you idle creatures, get you home!

Is this a holiday? What! know you not,

Being mechanical you ought not walk,

Upon a labouring day, without the sign

Of your profession?—Speak what trade art thou?

1 Cit. Why, sir, a carpenter.

Mar. Where is thy leathern apron and thy rule?

What dost thou with thy best apparel on?—

You, sir; what trade are you?

2 Cit. Truly, sir, in respect of a fine workman, I am

but, as you would say, a cobbler.

Mar.—But what trade art thou? Answer me directly.

2 Cit. A trade, sir, that, I hope, I may use with a safe

conscience; which is, indeed, sir, a mender of bad soles.

Mar.—What trade, thou knave? thou naughty knave,

what trade?

2 Cit.—Nay, I beseech you, sir, be not out with me: yet

if you be out, sir, I can mend you.

Mar. What meanest thou by that? Mend me, thou

saucy fellow?

2 Cit. Why, sir, cobbler you.

Flav. Thou art a cobbler, art thou?

2 Cit. Truly, sir, all that I live by is, with the awl: I

meddle with no tradesman's matters, nor women's matters,

but with awl. I am, indeed, sir, a surgeon to old shoes;

when they are in great danger, I re-cover them. As proper

men as ever trod upon neat-leather, have gone upon my

handy-work.

Flav. But wherefore art not in thy shop to-day?

Why dost thou lead these men about the streets?

2 Cit. Truly, sir, to wear out their shoes, to get myself

into more work. But, indeed, sir, we make holiday to see

Cæsar, and to rejoice in his triumph." &c.

It was indeed to see Cæsar that the craftsmen assembled in the streets of Rome, and not exactly to wear out their shoes. A public sight in modern days gives rise to the same feelings, and working men will leave their workshops, some of them casting their aprons off, and others only tucking theirs up, while hastening into the streets. It will be seen from our extract that Shakespeare gives his carpenters a leathern apron, on the principle, perhaps, that there was nothing like leather for preserving the wear of workmen's clothes from the action of tools and materials, as well as preserving their feet. We are not aware, however, that leather has ever been used for aprons by carpenters and joiners, though it has undoubtedly been used by smiths, and of old by bricklayers and masons, and shoemakers. Other craftsmen have used leather aprons besides; but in modern days we have never known house carpenters or joiners to wear leather aprons. The wood-working trades generally wear linen, or kindred white cloth aprons; but from some foolish whim, or rather foolish pride, or something akin to it, for some years past the practice of wearing aprons by building workmen appears to be going out of

fashion. Hundreds of carpenters and joiners in our workshops, and of bricklayers and masons on the scaffolds of our new buildings, may be seen now without an apron to save their clothes from dirt and dust, and constant wear and tear, by friction against brick, stone, wood, mortar, and other building material. All we can say is, that workmen are fools for their trouble or folly. Carpenters and joiners formerly wore aprons that covered the breast, as well as extended down to the knee; but of late years the aprons are mostly worn extending only from the waist down to the knees, or not so low. Pockets were made in the breasts of joiners' and carpenters' aprons for their handkerchiefs, and lower down on either side pockets for holding nails, or an odd short tool for handy use, when the workman would be working in a position (perhaps upon a ladder) where he could not bring his basket or small tool-box with him. The wearing of suitable aprons by workmen is a great saving to their clothes, and the custom, for sanitary reasons and cleanliness, ought to be continued in all branches of work. French building operatives wear a light blue blouse, or outer garment, over their working dress, which serves the purpose better than even an apron, in preserving their clothes. Some painting operatives also in these islands wear a sort of white or grey blouse, or frock, over their working clothes, to preserve them from being soiled or injured by paint. The farm labourers in the agricultural districts in England wear at their work a smock, made of coarse linen; and we would recommend the farm labourers, the towns' scavengers, and the building and ordinary labourers of this country to wear something similar. They would find it would be a great saving to them in the year, for the every-day garb of ordinary labourers has often to answer, with a little brushing and rubbing, to act as their holiday and Sunday garb also. A frock, or smock, or a good apron, would enable working men in general to appear more clean on leaving off their work, than they are often at present when commencing it. Bricklayers and masons have for several years now been in the habit of wearing a sort of stone-coloured corduroy, barrigan, or moleskin trousers, or a suitable kind of tweed, or other cloth, for hiding the dust or dirt. Their clothes are worn and soiled nevertheless, although the dust and dirt does not show as much as it would on darker clothes. We do not admire this process of hiding the dirt at the expense of clothes, and personal cleanliness and health. Let the apron be restored; it is no badge of servitude or plebeian inferiority, but a useful garment, that should never have been discarded. On the plea of cleanliness alone it should be adopted by all craftsmen during their working hours, and it is only silly prejudice, or senseless folly, allied to an empty pride, that could ever induce men to dispense with such an indispensable article of protective clothing.

Fat fortunes and nice pickings were made out of the Irish Postal Department in our fathers' time. A pound was often spent to collect twenty shillings; but what mattered that so long as the family management enjoyed their salaries and helped their poor relations at the public expense! How the Irish Postal system was managed from 1784 to 1831 may be found in detail in a pamphlet we have before quoted from in these pages, entitled "*A Brief Review of the Irish Post Office, from 1784 to 1831*," &c., by P. C. O'Neil, once an official in that establishment, but who was dismissed for knowing too much and not keeping his mouth shut. For a period covering forty-seven years between the above-given dates, the gross postage revenue actually collected and received amounted to the sum of £6,494,658 18s. 7½d., averaging £138,184 4s. 7½d. annually. The nett revenue paid into the Exchequer for the same period of time amounted to the sum of £2,351,403 17s. 9d., making, on an average of forty-seven years, £50,029 17s. 4½d. per annum. Deducting this sum of £2,351,403



17s. 9d. paid into the Exchequer from the sum of £6,494,658 18s. 7½d. actually collected, leaves a sum of £4,143,255 0s. 10½d. expended, which gives an average of £88,154 7s. 3d. per annum for the management or collection of this branch of the Irish Revenue. On continuing this calculation further, it is found the average gross revenue was collected at an expense of £63 15s. 11½d. per cent., and that the collection of the average annual nett revenue cost the public *the enormous sum of £276 4s. 5d. for every hundred pounds paid into the Treasury.* It is shown by Mr. O'Neil that between 1798 and 1829 there was paid to a Mr. Draper and his son for contracts and employments under the department the sum of £56,048 17s. 6½d., for services which could be performed, and were offered to be performed, for £28,280 10s., or, say, half the sum, for there was an evident loss to the public of £27,818 7s. 6½d., and this sum was irrespective of extra payments made to the above-named individuals for other services and alleged services. In more recent times there have been some nice pickings in the Irish Post Office in Sackville-street, and a little patronage, or, in plainer words, "jobbery"; but we have no personal ends to serve by making living officials or their relatives uneasy. We will conclude at present by observing that "sufficient to the day is the evil thereof."

A wonderful revolution has taken place in educational and mechanical matters during the past thirty years or so. In our own memory scholars and apprentices suffered great cruelties at the hands of brutal masters, and they had little protection, for the law was seldom invoked by their humble parents, and the Church, through its ministers, rarely moved for an inquiry in the interests of their flocks. We believe we have shewn on former occasions how boys were treated in the old Charter Schools of this country before their abolition, and the acts of gross inhumanity that were committed by schoolmasters and their assistants or monitors. Many a poor youth was killed by constant bad treatment, by being beaten, bruised, whipped, half-starved, and allowed to die of foul disease engendered by gross neglect. Indoor apprentices were often brutally treated by their masters in various trades, worked for long hours, badly fed, and their labour taken for nothing, save bare subsistence of the worst and most scanty description. Apprentices were, however, never so badly treated as they were in the sister kingdom. For the one brutal master here there appear to have been two or more in the sister kingdom, according to the reports that have come under our notice. This is, no doubt, to be accounted for from the fact that England has long been a great manufacturing country, and the system of apprenticeships was widely extended among large masters and small. The state of the hardware artisans in England appears to have been deplorable thirty years ago. According to Commissioner Horne's Report, 1843, the system of work at Willenhall, three miles from Wolverhampton, was to do nothing for two or three days but drink and carouse, and then work for sixteen or twenty hours for the remainder of the week. The time of the workmen (file makers) seems to have been equally divided between drinking and filing. Children of both sexes were to be seen perched upon blocks, working with the men. They were apprenticed to the men as soon as they were able to hold a file, and their masters sold them from one to another, the children being often brutally used. The evidence of the children themselves was borne out by other witnesses. One was beat with a whip with four lashes to it, tied with knots; the master of another boy cut his head open five times—once with a key, and twice with a lock, knocked the corner of a lock into his head twice—once with an iron bolt, and once with an iron shut—a thing that runs into a staple. The children were forced to work from six till ten or eleven at night. The boys were, in some instances, so hardened by brutality and bad

heating that they were disposed to treat lightly ordinary heavy punishment. One boy, on being interrogated, said "his master did not beat him much; *only* with a stick, or some thick ropes, or the handle of a hammer." Another boy, under the same circumstances, said "he was pretty well treated;" and the master of a third "only laid it on five minutes at a time." Kicking with nailed shoes, violently beating with ash sticks, knotted ropes, and hammer handles, and wrenching the ears till they bled, appeared to be ordinary punishments. In 1843, and for some time after, there were no magistrates in the above lawless place, and no redress for the children. The moral condition of the population was thus summed up:—"Moral feelings and sentiments do not exist: *they have no moral feelings!*"

The Willenhall of to-day is still famed for its files, and keys and locks and bolts; and it is not long since we read of a "strike" or "lock-out" having been there. The system of child-labour and apprenticeship which formerly existed no longer exists, and apprentices have now protection against brutal masters. Willenhall has grown, education has progressed, magistrates and policemen are not sparse, and, though apprentices may be transferred with their own wishes from one master to another, there is no selling of white slaves and traffic in flesh and blood. Talking of apprentices and apprenticeships, we regret to see in all trades a tendency to do away with the system. Boys are now hounded often to their parents in the same trade, or in a sort of manner to a trade body, and the youth picks up his trade in the best way he can, passing often from one job to another. Seven years may be far too long for a servitude to one master for learning some branches of trade under our modern system of organized labour, but five years is not too much to acquire a skilled knowledge of most trades. The system of apprenticeship should be retained and enforced, and a young man's indenture, when out of his time, should act as of old, as a criterion of his qualifications, or in the character of a diploma, endorsed by the governing officers of his trade society or craft.

#### MAC SARCASM ON "RESTORATION" v. RESTITUTION.

"Restoration" is the craze.

"Bah!" said Mac, "no absolution  
Should men get who churches raze,  
'Till they 'restore' by restitution.

"Fresh-fledged clerics, architects,  
Goths with Vandal reservation,  
From destroyers, who expects  
Monumental preservation?"

"Give them money, give them power,  
And with paint, whitewash, and plaster,  
They will daub each church and tower,  
Shrines of art, and God our Master."

Thus spoke Mac, a man of taste,  
A man of Art, and erudition,  
Who modelled "Beauty and the Beast,"  
And lashed his critics to perdition.

Mud Island. CE.

#### A TECHNICAL UNIVERSITY FOR WORKMEN.

IN reference to this foundation, of late often mooted in the interest of the London City Companies or Guilds, the *City Press* informs the public that "Upwards of £10,000 per annum has been conditionally promised in connexion with the project of a National Technical University under the auspices of the livery companies. In addition to the Mercers', Drapers', Fishmongers', Goldsmiths', and Clothworkers' Companies, the Armourers and Braziers' and Plasterers' have given valuable support to the movement, the prospects of which are increasingly hopeful. Nothing has yet transpired as to the reference of the Court of Common Council for utilizing the Gresham College endowment in connexion with the project."

We hear nothing as yet of the intentions

or the practical support which is to be forthcoming on the part of the other two or three score of City companies. Prizes have already been given by a few companies, which include some of the above-named; and we are of opinion that, if the pressure of public criticism and opinion had not been so continuous as it has been of late, nothing would have been heard of the proposed "Technical University" on the part of those City of London guilds, which have long outgrown their uses, and which are only nominal guilds of trade. It is now many years since the tocsin of their reform was sounded, and a plan mapped out out for their reorganization in consonance with the present age; but neither the City companies nor the so-called "Irish Society" would reform or let the daylight in upon their transactions. It was a lucky incident for these companies that the Conservative party came into office, or assuredly, had the late Government remained in power, a new commission of inquiry would have taken place, and the trusts of these companies put under a better system of management. Except so far as the Irish Society is concerned, this country will benefit little by any change that may take place, but the cause of technical education will, if the intended university is established on a proper and liberal footing, and its advantages not allowed to be purposely and specially utilized for the benefit of the middle and upper classes. There are ample funds available after all charitable intentions and purposes are attended to, and the surplus funds, minus a sum for fair expenses for management, should be devoted to educational and skilled handicraft improvement and elevation. We have very strong misgivings, however, that if the management of a technical university is left entirely under the control of the City companies, under their present constitution and management, that it will not be a success—that it will not be truly beneficial to the interests of British workmen and handicrafts; and, instead of being what it ought to be—a National Technical University—will continue to be what its present promoters intend it to be—a class institution.

#### INSTITUTION OF CIVIL ENGINEERS OF IRELAND.

A GENERAL meeting of the Institution was held in the Museum Buildings, Trinity College, on Wednesday evening, the 9th inst., Mr. John Bailey, Vice-President, in the chair.

The first paper read was by Mr. J.A. Fahie, Associate, "On a New System of Wood Pavement," the substance of which we give on another page, and in which are set forth the details of the patented system of our fellow-townsmen, Mr. Samuel Robinson.

After the reading of the paper Mr. Robinson came forward and explained, with the aid of models, the system of laying the blocks, filling in the concrete, and the facility with which tram rails could be laid.

The second paper read was by Mr. E. J. O'B. M'Swiney, Associate, "On Steam Tramway Engines," portion of which we also give.

Mr. J. P. Cotton, Hon. Sec., said that, considering the lateness of the hour, and that many of their members who might join in a discussion on the papers read were away in London, he thought it would be wiser to adjourn the discussion till next meeting, and he moved accordingly.

The motion having been adopted, the meeting adjourned.

We understand that it is intended to form a limited liability company for the purpose of taking up and working Mr. Robinson's patented system of pavement. It would be advisable that some portion of a roadway over which there is heavy traffic should at once be laid down as an experiment. This would practically test the invention, and, we doubt not, prove its superiority to any system heretofore laid before the public.



## WOOD PAVEMENT :\*

## ITS HISTORY AND STATISTICS.

The history of wood pavement in the United Kingdom goes back only to 1840, when the first blocks were laid in the Old Bailey, London, and shortly afterwards several other streets in that city were laid in the same material; but the streets were not then cleansed as well as they are now, which was not advantageous to the wood, nor was the mode of preserving its surface well understood. The method of laying the blocks also was complicated, and the pavement not lasting longer than about seven years, a prejudice arose against it, and wood pavements according as they wore out were in some instances replaced with granite, which was then, as it is now, so well known and so universally used. Nevertheless, wood was retained in many of the leading thoroughfares. It has been renewed from time to time by the house occupiers at their own expense, who approved of this pavement because of the almost complete freedom from noise which it affords; and, according to latest reports, there is at present an immense area of London streets laid in wood of various kinds, and under different patented processes, the advocate of each claiming, of course, special advantages for his own over all other rival systems.

Asphalt as a road covering is of more recent date, having been first laid in Threadneedle-street, in 1869. This was the compressed asphalt of the Val de Travers Company. Shortly afterwards Cheapside, the Poultry, and many other thoroughfares were laid with asphalt of this and other kinds, and at present there is a very considerable portion of London laid in the various compositions of asphalt known as Val de Travers, Limmer, Barnett's, &c.

In considering the relative merits of asphalt and wood generally, it will be convenient to imitate the plan adopted by Mr. Haywood, and note the subject under four heads—viz., Convenience, Construction, Safety, and Durability, the latter including facility of repairs. Firstly, then, as to Convenience. The author considers that one of the principal objects to be attended to in adopting either wood or asphalt for roadways should be to diminish the traffic; and, of all the known pavements yet tried, wood makes the most noiseless. The wheels of vehicles run over asphalt as smoothly as along a street tramway, and the only noise which is perceptible from this material is that caused by the clatter of the horses' feet; upon wood this clatter is scarcely heard.

It is easier to repair pavements of wood than those of asphalt; the latter cannot be suffered to get out of repair, even to the smallest extent, because then the general surface in the neighbourhood of the defect will be injured in all directions, while, should wood be worn into inequalities of surface, owing to defective blocks being used, or partial depressions of small portions occurring, the surrounding surface will not be materially injured. Asphalt requires more constant cleansing than wood; moisture is certainly more readily absorbed by wood than by asphalt; but if wood be kept reasonably clean, the dampness does not affect the safety or comfort of the traffic. When dry weather comes immediately after rain there is not so much dust upon wood as upon asphalt.

It is naturally easier to keep asphalt clean, because, being without joints, the water runs more readily off it; nevertheless, wood can also be kept quite clean by a little attention. It is stated that the carriage-way of King William-street, London, which was laid by the Improved Wood Pavement Company, is being kept in a state of cleanliness never before attained on wood. Washing with jet and hose is the best mode of cleansing pavements; but it does not appear whether the expense of washing wood is greater or less than that of asphalt, the moisture left on the

surface of asphalt by washing makes it quite slippery:—wood is not affected in this manner. It would be found inconvenient to water asphalt for the purpose of laying the dust, and on that account it must be kept all the more scrupulously clean by constant removal of the refuse. Wood, on the contrary, may be watered without producing any slipperiness; nor is it necessary to strew wood with sand or gravel when damp, as must be done with asphalt in order to prevent slipperiness. Therefore, on the point of convenience, although asphalt is smoother, drier, and perhaps cleaner, it is nevertheless inferior to wood as respects noiselessness and freedom from dust.

With regard to Construction—it appears that asphalt may be laid at the rate of from 100 to 150 yards per day. Wood may be laid, on an average, at the rate of 125 yards per day. As is well known, asphalt cannot be laid in wet weather, whereas wood blocks, if not requiring a cement foundation, can be laid in all weathers. The repairs of all pavements necessarily depend on the character of the material, and experience proves that repairs can be carried on with greater ease, and also with greater convenience, in wood pavements than in asphalt, if we consider that the repair of even a small patch of asphalt necessitates the presence on the spot of those objectionable-looking cauldrons in which the mastic is prepared, and the disagreeable smoke usually produced during such preparation. Therefore, it is evident that wood can be laid quite as expeditiously as asphalt, and also that repairs may be carried on with greater facility and less inconvenience on the former than on the latter material.

The feature of safety in relation to pavements, is one of the most vital importance, when the material to be used as a road covering is under consideration. The slipperiness of asphalt has been already referred to in contrast with wood; and experience and observation prove that, under all circumstances, wood produces a less slippery, and, therefore, a less dangerous pavement. Complaints of the slipperiness of asphalt have been constantly made since its first introduction to these countries; and, in the year 1873, so great were the opposition and prejudice against the laying of this material in the streets of London, that petitions from a number of firms and companies, owning amongst them over 15,000 horses, were presented to the municipal authorities, in which the petitioners, after stating that, in their opinion, asphalt paving was objectionable, and that horses were quickly deteriorated by travelling over it, prayed that no more of such paving should be laid. It was then determined, on, by the Commissioners of Sewers, to institute a series of observations of all the accidents occurring upon asphalt, granite, and wood, for the purpose of obtaining exact on the point.

[The results of these observations were given by the author, from Mr. Haywood's report as published.]

As to durability and cost, we have not sufficient experience of asphalt to enable us to compare fairly its utility with that of wood; the first asphalt in London was laid in 1869, and at the end of 1870 there were only three streets paved with it in the metropolis. Within the last few years, however, some miles of streets have been laid, and at least a dozen different sorts of asphalt have been tried, five of which have, it appears, already failed.

Mr. Haywood gives it as his opinion, after full consideration of all circumstances, that without much repair none of the asphalts would last more than from five to six years, and that, in the course of from six to ten years, the entire surface of all will have been renewed. We have more experience, however, as to the length of time which wood pavements may last, remembering that the first wood pavement was laid in London in 1840, and since then numerous varieties have been tried. They have been laid in streets both of large and small traffic, and subject to

almost every condition which destroys a pavement. Ample experience, therefore, exists both as to the durability and cost of wood.

From statistics given by Mr. Haywood, in his admirable report above referred to, showing the durability and cost of the wood pavements which were first laid in London, the average life appears to have been nine years where the traffic was heavy, and eleven years where the traffic was light. The average measure of life here shown is short, but, it must be borne in mind, that when wood was first used the streets were not kept so well as they are now, nor was the construction of the pavement so practically understood. A great number of contracts have been entered into since 1870 with the owners of several different wood systems, and, according to the statistics referring to those recent contracts, we find that the usual period for which the pavement is to be maintained by the contractors is sixteen years, while the average first cost per square yard is 16s., and the average cost of maintenance, per square yard per annum, for the contract term, is 1s. 4d. Contrasting these figures with those referring to recent asphalt contracts, we find that the usual number of years asphalt is to be maintained by the contractors is seventeen; that the average first cost per square yard is 17s., while the agreed cost of maintenance per square yard per annum for the contract term is 1s.

From these data it will be seen that, although the first cost of wood is slightly slightly less than that of asphalt, yet the latter is supposed to be maintained at a cheaper rate than the former; however, as has been stated, we have not as yet had sufficient experience as to the measure of life of asphalt to decide conclusively as to its expense and durability.

Thus it appears that the conclusions to be drawn from the foregoing remarks are, that although asphalt and wood have each in some respects advantages which the other does not possess in equal degree, still, on consideration of some of the most important features in connexion with a pavement, such as freedom from noise and dust, convenience in repairing, and getting at gas and water pipes underneath, and lastly, safety, we must give the verdict in favour of wood. In fact, the advantage of quietude which wood possesses over all other pavements, will alone eventually secure it a public favour.

[The author then described a few of the methods of laying wood at present in vogue.]

## ROBINSON'S IMPROVED SYSTEM.

And now to consider the system which is here submitted to the notice of the Institution, and which is the invention of our fellow-citizen, Mr. Samuel Robinson, of Westland-row.

The principle here aimed at by the inventor is to secure one uniform bearing and general distribution of the load over the pavement, by uniting all the pieces composing the entire road surface. To this end he first forms groups or clusters of blocks of wood dowelled or pinned together, leaving spaces between each block and those adjacent thereto to receive concrete, which latter may be composed of any suitable materials. The group or cluster of blocks may be made of any desired shape or diagram, such as octagon, hexagon, or otherwise, and such group or cluster may be bound with bands of iron, for the purpose of holding together and firmly securing the series of blocks composing the cluster or group. These iron bands or rings (the inventor uses two on each piece of flooring) are placed equidistant from the upper and lower surfaces of the piece of pavement, so that their outer surfaces will come opposite, or rather in contact with, the outer surfaces of the rings or bands on the neighbouring pieces when laid in position. Between these bands, and also between each piece of pavement or group of blocks, a key or wedge is inserted horizontally, which serves to cause an equal and general distri-

\* By Mr. J. Angelo Fabie, Associate. Read at meeting of Institution of Civil Engineers of Ireland, May 9th.



bution of bearing over the entire surface of the roadway.

Mr. Robinson proposes to use blocks  $4\frac{1}{2}$  in. by  $4\frac{1}{2}$  in. of section, and 9 in. deep, resting on their ends, and he states that, should extreme pressure or blow light upon any one of the small blocks composing the floor, its power of resistance is supported by the surrounding dowels, as well as by its own ground support; then, in consequence of each piece or group of blocks being keyed to it neighbouring piece or group in the manner just described, it is maintained that the entire pavement will possess the power of resisting strain, somewhat on the principle of an arch.

The substructure which it is proposed to adopt for this pavement consists of a foundation of concrete laid on a firm substratum, and over the concrete a layer of tar and sand on which the blocks are finally laid. This foundation, the inventor maintains, will afford an elastic bed, and also act as a damp course in keeping the ground moisture from the wood, while, at the same time, it possesses the power of absorbing any moisture which may possibly find its way through the pavement.

It is also claimed for this invention that it can be well adapted for churches, public buildings, and basement floors, being dry and warm, and capable of being laid in a variety of patterns.

There is another independent and a novel feature in connection with this invention under consideration, and that is, a new method of constructing and laying tram rails on this system of pavement. The models exhibited will illustrate the nature of this ingenious arrangement more clearly than can be described. It is a feature that does not appear to have been touched on heretofore by the patentees or advocates of any road pavement yet proposed, and is a point in the history of roadmaking well deserving the attention and consideration of the proprietors of our tramway systems, who are necessarily always on the *qui vive* for any means by which the great wear and tear on their roadways might be reduced.

In conclusion, the author ventures to suggest that there can be no finality in any system of roadmaking. The conditions of nature to man are constantly changing, so also the climatic influences are everywhere different, and the nature of the substratum on which a pavement rests always varies; therefore, each system of roadway must stand or fall on its own merits, and by its adaptability to local circumstances wherever laid.

#### THE BALFE MEMORIAL.

We regret that this movement, which has unfortunately become a "stand-still" one for some time back, should be made the occasion for recrimination and indulging in personal animosities on the part of some of the members of the committee. We shall not be so invidious as to say who we think is mostly to blame, for there are possibly faults on both sides. As we understand the project from the commencement, we took it to be that the original intention was to erect a statue to our eminent native composer and countryman. The creation of a Musical Scholarship seems to have been an afterthought on the part of one or two, perhaps more, members of the committee, but it was not certainly the desire of the great majority of the members, the intending subscribers, or the public. The first intention or resolve should not have been departed from without strong and cogent reasons being given, and the opinion of the friends and countrymen of Balfé been thoroughly ascertained. The founding of Musical Scholarships in connection with the Irish Academy of Music, is a commendable proceeding in itself, and, if supported by the musical fraternity as a whole, it could be made successful, apart from the original project. In England a statue to the memory of Balfé exists, erected through a subscription, though that statue cannot be looked upon as

a national one. We would kindly, and with a becoming spirit, advise our countrymen at large, and our citizens in particular, of all shades of political and religious views, to let bygones be bygones, and to give no further ear to senseless disputes, but unite one with another in contributing funds for erecting a suitable and representative memorial to our great composer. There can be no valid objection, in the first place, to the erection of a statue; and it would be simply a disgrace were the project allowed to drop through selfish interests or private feuds.

#### CORRESPONDENCE.

##### FREE BRIDGES—THE LIFFEY "METAL" BRIDGE.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—It is time that the question of freeing the Metal or cast-iron bridge was determined, and brought to a direct issue. In nearly every city and town in the sister kingdom, road tolls and river bridge tolls are being done away with, and all impediments to free passenger traffic removed. The Metropolitan Board of Works of London, backed by the voice of the public, are now sweeping away the last of these tolls from bridges over the Thames, several bridges having been freed previously, since the free bridge movement was inaugurated some years since. How long are the citizens of Dublin going to bear the impost of the toll levied for foot passengers over the cast-iron bridge opposite Liffey-street? The Corporation of Dublin have failed in their duty in this respect, as they have in other directions. It will soon be two-thirds of a century since this private speculative toll bridge was allowed to be erected. Previous to that time there was a ferry at the spot, the property of the old Corporation; but, owing to one of the nice jobs that were common in town councils, and are still common enough in these bodies, an Alderman Beresford and Mr. William Walsh purchased the tolls of this Liffey Ferry, and erected the bridge. The cost was stated to be £3,000; but the emoluments for many years were large for the two private speculators. The representatives of the original owners would no doubt be glad to sell their interest at a fair price. The purchase money could not, under present circumstances, amount to a large sum, and the cost could be met in more easy ways than one. The bridge, if freed, of course cannot be used for vehicular traffic, but only for the accommodation of foot passengers.

I hope, sir, these few remarks, made known through the pages of the IRISH BUILDER—a journal I am glad to see is foremost in advocating every social, sanitary, building, and other improvement calculated to advance the general good—will lead at once to the renewal of the agitation for the freeing of the Metal Bridge from a toll. The impost of direct road and river bridge tolls are relics of barbarous times, and they should not be tolerated among a people professing to be Christians and civilised.—I am, sir, your obedient servant,

C. G. RAYMOND.

Dublin, May 12, 1877.

##### THE ARTIZANS' DWELLINGS ACT IN DUBLIN.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—Can you inform me what is being done in the matter of carrying out the important provisions of the Artizans and Labourers' Dwellings Act in this city by our corporation, and to what extent on the other hand is private enterprise moving to supply the urgent want in this city of healthful, well-built, and comfortable homes for the working classes? You were the first, I believe, when the act was before Parliament, to earnestly advocate its extension to this country. I fear vested interests in several of our local bodies block the way; and if public opinion is not brought

to bear upon the "obstructives," the good intentions of the Home Secretary will be defeated. This city, you are well aware, is full of fever dens and tumble-down and crime-soddened rookeries, and the work of reform will not be earnestly attempted by some of our public bodies unless the cliques who rule them can see the way of perpetrating a job to their own advantage. In conclusion, I would ask again, what is being done, and what is intended to be done, by our municipal and township bodies? Perhaps Mr. John M'Evoy, or the Council of the Dublin Sanitary Association could afford me and others of your numerous readers, some useful information in reference to the question.—Yours,

AN INDEPENDENT P.L.G.

[Private enterprise, or rather public company enterprise, is doing something to meet the want; but municipal enterprise is as yet confined to talking about doing something. Perhaps the worthy gentlemen mentioned by our correspondent will respond in supplying the information solicited.—ED. I.B.]

#### STEAM TRAMWAY ENGINES.\*

In laying before the Institution a short paper on the subject of Steam Tramway Engines, it is hardly expected to offer anything very new or very interesting; if, however, these few remarks form but a nucleus and rough foundation for discussion, and tend to elicit valuable suggestions, something will have been attained.

In entering the present (so to call) tramway era, a few words on the subject may not be out of place. Already much has been said, and much has been written on the means of propelling these tramway cars. It is not intended at present to discuss the relative merits or demerits of the various proposals made as regards springs, pneumatic or other motive power; but to endeavour to show that by adopting steam engines in this country, a very considerable saving will be effected, with great advantage to shareholders, and to the public generally, and though scientific men may see their way to advise the adoption of steam, still if the question is not framed and shaped for our municipal bodies and tramway companies into a proposition capable of practical working, all theoretical experiments and improvements will avail but little.

It is well known that a large number of horses are in a short time rendered useless, and that the cost of renewals is an enormous item under the present arrangement.

For some time past the author has been making inquiries and looking into this matter of steam tramway engines, has written a little on the subject, and is led to think (and he has little doubt the Institution will agree with him) that sooner or later steam will take the place of horses. He believes that tramways are in their infancy, and are capable of extensive development, utilizing them for carrying off street and road scrapings to convenient depôts, watering roads, distributing materials for repairs, connecting small towns and villages to main railway lines, as well as facilitating the intake of cargoes from the quay-side—say along the North Wall or elsewhere, and a variety of other purposes.

Owing to recent improvements, an engine can be now supplied, an ordinary tank locomotive, fitted with patent condenser, showing no appearance of steam, and making no noise whatever. It can be worked by a man of ordinary intelligence, who will have nothing to do more than turning the steam-handle and break. It can start immediately going up, and stop in four yards coming down an incline of 1 in 20, and in five feet on the flat, going at ordinary speed. This is done without making the engine of greater weight than is required for the "bite" and traction on the rails, and the steam can be easily kept up

\* By Eugene J. McSwiney, Associate. Read at meeting of Institution of Civil Engineers of Ireland, May 9th.



to the required pressure, and the water maintained to the proper level in the boiler. The engine can be stopped *quicker*, and is *safer* than horses, for in running through crowded streets, the man having no horses in front can see better ahead and up cross streets which he passes, and if anything is coming down upon him, he can stop in half the width of the street, which in many cases will not exceed the length of a horse. This engine can be seen at work, and its powers guaranteed in every respect. It can be used for watering rails and streets, and the consumption of fuel is small. The price ranges from £200 to £700, according to the specification required, taking the steepest gradient, weight to be drawn and gauge into account. It is capable of taking the sharpest curves, and is of sufficient power to draw two or more loaded passenger cars, if required. In Vienna it has given much satisfaction, the Emperor having ridden on it frequently, and been much pleased with his trips. In Paris it has been tried with considerable success. These locomotives are capable of doing the work of 14 horses, but for calculation and to be *within* the mark, let us take their value at 10-horse power, and the price of the engine at the extreme figure, and then compare the relative cost:—

*Engine.*—Cost, say £700; interest at 5 per cent., £35; depreciation, £70; repairs, £50; fuel, £60; oil, packing, &c., £10. Total, £925.

*Horses.*—10 horses at £50 each, £500; interest at 5 per cent., £25; renewals, £125; feeding at 15s. per week, £390; stabling, £100; shoeing, &c., £30; harness, £20; total, £1,190.

To horse the Edinburgh cars costs 10d. per mile, it has a gradient of 1 in 15 for 40 yards. In Paris, Merryweather's brake works automatically if car exceeds a certain speed. Scott Moncrieff's patent costs, it is said, 5d. per mile, and takes 2½ minutes to recharge at end of every three miles. A "Traction Company" has been found to work existing tramway lines at so much per mile with steam engines.

Upon the first introduction of railways in England, Parliament stipulated that they should be worked by horses; the steam engine was too terrible an institution to be tolerated or thought of. That tramway cars will be propelled by steam there is no reason to doubt, and as regards investors in tramway property, how will it affect their profits? Some are sanguine enough to anticipate a saving of 30 or 40 per cent., but if by the introduction of steam there would be even a saving of 10 per cent., would it not be of considerable importance? It would at once introduce into the working of tramways an element of certainty which, under the present system of working, it cannot possibly enjoy. It can be calculated what amount of fuel an engine will consume, and what the wear and tear will be, and the cost of working; but no one can, with this certainty, anticipate what may be the price of corn, hay, and horses for the next three years, they being all subject to varied fluctuations—disease, distemper, all tending to render the use of horses dangerous and uncertain. In the face of present European affairs, it may be considered high time to look out for a substitute for horses, as it may not be improbable that their value and first cost may be considerably advanced ere long.

The object of this paper is to draw out objections, if any, that may exist to the introduction of these engines into this country, and if there are any real obstacles in the way, to see if they cannot be overcome. The whole matter is undoubtedly worth the consideration of corporations, grand juries, and tramway companies.

In a letter the author has received from Mr. Salt, Chairman of the Committee appointed to investigate this matter, by the House of Commons, it is to be perceived that the whole drift of evidence taken before him results in favour of using mechanical power for working these cars.

The author hopes, in conclusion, that ere

long these engines may be seen running, not only through Dublin and our suburban districts, but through all Ireland, as "feeders" to our main railway lines.

### THE WATER SUPPLY TO THE NORTH DUBLIN UNION WORKHOUSE.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—Your readers may be surprised to learn that all the water used in the North Dublin Union Workhouse is taken from a portion of the Royal Canal—i.e., a pool situate behind the western side of Constitution Hill, and popularly known as the "Turf Harbour."

Grangegorman Prison also was supplied with water from the same source until the Vartry water was laid on in Dublin, and the authorities then rejected the "Turf Harbour" supply as unfit for the use of the criminals confined in the prison.

That the philanthropic Board of Guardians of the North Dublin Union at their last meeting would take steps to continue the supply of impure canal water to the unhappy inmates of the poorhouse—water which they must have known would not be supplied to the criminals in the adjoining prison, and which those guardians would not allow to be used in their own houses—must seem very strange to such of your readers as have read the report of their meeting in the Dublin journals of the 10th inst.

The use of this water in such an extensive establishment (coupled with the sale of diseased meat to the poor, lately exposed), may, to some extent, account for the increasing death-rate in Dublin.—I am, Sir, yours,

JAMES KIRBEY.

9 Peter's-row, 14th May, 1877.

### THE COOMBE LYING-IN HOSPITAL.

The ceremony of "opening" the additional buildings just completed at the above hospital, took place on Saturday by his Grace the Duke of Marlborough. The entrance is approached by a double flight of steps, from which access is obtained to the first floor, on which are situated the board-room, the offices of the master and assistant master, rooms for the extern and intern pupils, secretary, porter, &c. The vestibule and corridors are spacious and well-lighted throughout the entire building—the ventilation is excellent. The second floor contains wards intended for the reception of patients on their entering the hospital. These are large, airy apartments, with every convenience necessary for the health and comfort of the inmates. Of these wards one is called the Leinster ward, and a second the Lady Olive ward. The third floor contains four wards—the Brabazon, the Marlborough, the Findlater, and the Alexandra. The Marlborough ward is intended for the reception of pay patients. The entire accommodation formerly afforded was thirty-one beds; the additional buildings, with the Guinness Dispensary wing, affords double that amount of accommodation. The architect was Mr. J. F. Fuller, and the contractors, Messrs. Millard and Son.

### THE PROPOSED SCIENCE AND ART MUSEUM, AND PROPOSED APPOINTMENT.

At a meeting of the Royal Dublin Society, held on Thursday last, Phineas Riall, Esq., D.L., in the chair, a letter was read from the Council of the Royal Irish Academy, declining to sanction the proposed conference of the Science Committee of the Academy with a committee of scientific members of the Royal Dublin Society on the terms proposed by the council of the latter, and the draft of a further letter to the council of the academy was adopted.

[A letter recommending Dr. Steele, the registrar, who is such already an officer in the Civil Service, for promotion to the directorship of the proposed museum of science and art, was unanimously adopted,

and his Grace the Duke of Leinster was requested to forward it to the Lord President of the Council.]

The prize list of the next Winter Show to be held on Tuesday, December 11th, and following days, was adopted.

The council nominated (subject to acceptance) Sir George Hodson, Bart., as one of the judges under the amended scheme for the management of the Taylor art prizes and scholarship.

The above bracketed paragraph contains a most strange proposal. Dr. Steele is, no doubt, a respectable gentleman, and has been a useful and efficient registrar under the old *régime* of the Dublin Society; but he would certainly be out of place in the new office that some busy-bodies are endeavouring to obtain for him, either with or without his concurrence.

### THE ROYAL IRISH ACADEMY.

A MEETING of the Academy was held at their house, Dawson-street, last evening, Sir Robert Kane in the chair.

A paper was read by the Secretary (for Rev. James Pearson), entitled, "Observations on the Phenomena of the Tides, as observed at Fleetwood, Lancashire, with illustrations from the Tides of Rathmullen, county Donegal." By means of the researches and calculations made by the Rev. Mr. Pearson it is now practical to predict the height of the tides at Liverpool to within about two inches.

Mr. D. Crofton, B.A., read a paper "On a Slab, with Cuneiform Inscription, in the Library of T.C.D." This inscription Mr. Crofton translated as follows:—" (This is) the palace of Assur-Nazier-Pal, the worshipper of Assur; (it is) the dwelling of the humble worshipper of Ninip, the exalter of Anu and Dagan, the seeker after the great gods."

Dr. E. P. Wright read a paper "On a remarkable Species of Corticate Sponge, showing Heteromorphic Zooids."

### NOTES.

**CELTIC LITERATURE.**—Dr. Whitley Stokes has just printed privately, at Calcutta, three Irish Homilies of the fifteenth century, from the Lebar Brecc, on the Lives of Saints Patrick, Brigit, and Columba. The Irish text is on the left pages, and on the right is an English version of it by Dr. Stokes.

**THE ALEXANDRA PALACE.**—We are glad to note that this favourite place of amusement and healthful resort is again opened, under most favourable auspices. Though changes have taken place in its proprietary and in some matters of detail, the Palace is under the management of Sir Edward Lee; and visitors from Ireland will have an opportunity this season of renewing old acquaintances, and finding apart a round of attractions not exceeded by any other in the London metropolis.

**A NOVEL FIRE EXTINGUISHER.**—The recent fire at Metz Cathedral gives special interest to an American invention for protecting churches from fire. At a Roman Catholic church in Virginia, Nevada, a large iron pipe has been carried up to the cross at the top of the steeple, and throws up large jets like a fountain, which in case of necessity would effectually drench the spire and roof. A Brussels architect also suggests a safeguard against fires in theatres. He recommends that the gas-pipes should be connected with the water-works, so that by a simple arrangement of taps the gas might be turned off, and enough water turned on to extinguish any conflagration.

**TECHNICAL EDUCATION AND THE SOCIETY OF ARTS.**—The Court of the Drapers' Company has just made the very liberal grant of £1,000 to the Society of Arts for the promotion of technical instruction. This money is to be expended in providing courses of lectures suitable for artisans, the subjects selected by the technical committee of the company being (1) metal working, and (2) working in wood. In thus selecting special subjects, the object of the company is to provide instruction which may be serviceable to members of as many different trades as possible, in place of merely teaching those who are connected with a single trade alone. The lectures are to be given at the Society of Arts House, and the arrangements are to be in the hands of the society, aided by a committee of the court of the Drapers' Company.



## THE ROYAL GEOLOGICAL SOCIETY OF IRELAND.

A MEETING of this society was held on Monday, the 7th inst., the Rev. MAXWELL CLOSE, M.A., President, in the chair.

A paper "On the Occurrence of Pholadidæ Papyracea at Glenarm, County Antrim, with specimens," was read by Mr. W. A. Traill. The author first described the particular family of molusca—viz., the boring shells, the pholadidæ—and how the commoner species, *P. candida*, *P. crispata*, and *P. dactylus* were found along the shores of Belfast Lough. The rarer species, pholadidæ papyracea, he had found last winter near Glenarm, several beautiful specimens of which he exhibited. Some were enclosed in blocks of the new red sandstone, which formed their peculiar habitat, and into which they had bored, growing in size as they excavated till they became permanently encased in their self-formed prisons. The shells were very thin and fragile, and marked with wrinkles or platings, and were provided with a calyx, or cup-like appendage, at the posterior end, composed of the papyraceous, or paper-like vaulted laminae. The largest specimens obtained were a little over 1½ in. length. Another and still rarer form, which wanted the calyx, was also exhibited, and which by some authorities was considered the young or immature stage of the *P. papyracea*, or an abnormal form or specimen of unusual growth, but by Dr. Turton and others was thought to be a different species, and was styled pholas lamellata. The localities where the species *P. papyracea* had before been found were enumerated, and reference made to previous authors—Forbes and Hanley's British Molusca, to the "Guides" published at the Belfast and Glasgow meetings of the British Association, and to the Rev. Dr. Grainger's collection. These localities included the South Devonshire coast, Lambay, Whitehead, The Maidens, and Portrush, to which, in the County Antrim, the additional locality was added of Glenarm, where the largest and most numerous specimens were obtained from along that coast. There also was found the possible different species of *P. lamellata*, or variety of *P. papyracea*, hitherto unrecorded as occurring in that district. On the request of the Rev. S. Haughton, F.T.C.D., Mr. Traill consented to present some of the specimens to the Trinity College Museum. Some were also presented to the museum of the Royal Dublin Society. Professor Hull, F.R.S., read a paper on the "Chart of the Carboniferous Limestone." A paper was read by Mr. E. T. Hardman "On some Post-Miocene Faults observed on the borders of Lough Neagh." The Rev. Prof. Haughton, F.R.S., exhibited a tooth of *Elephas primigenius*, found in Dunmore Cave, County Kilkenny; and Professor Hull exhibited a core from the deep borings through the strata beneath London.

## "THE CELTIC LANGUAGE."

A CORRESPONDENT of the *Athenæum* writes to that journal as follows:—

Formerly there were four Celtic professorships in Ireland—in Trinity College, Dublin, so long and ably held by Prof. O'Mahony, and in the Queen's Colleges of Belfast, Cork, and Galway. The celebrated John O'Donovan was professor at Belfast. There was also a Celtic honour at the degree examination in the Queen's University. From 1852 until 1863 thirteen students graduated with honours in Celtic. What is the state of the case now? There are now no professorships of Celtic in the Queen's University, and no honours. The Queen's College professors made application to Government for increase of salaries, and—will it be believed?—Government satisfied their hunger, by sacrificing the two chairs of Celtic and Agriculture, and dividing the proceeds amongst the remainder; and the same process is now being pursued with regard to the Vice-Presidentships. As to the honours—when going up for my degree, I applied to

Professor Connellan to be examined in Celtic. He wrote back to me that there was no hope that I would be permitted. He made inquiries, and the answer he got was that there were no funds. I proposed to go in for the certificate without the prize. The answer I got from him was that it could not be done, as it seemed to be determined to discourage the study of Celtic.

Now, since Oxford has got a professorship and Edinburgh will soon be provided for, there can be no just cause for refusing to revive the chairs at Belfast, Cork, and Galway, and restoring the honour at the Queen's University. From the tone of the present Government, it does not appear that they are afraid of the Celtic MS., or see sedition in Celtic scholarship. I hope some member will move that the modest sum of £300 be added to the estimates for this purpose. It would be well, however, to add to the conditions of holding the chairs that they tenable for only four years, thus making them not a pension for worn out, but a prize and encouragement for young scholars. This condition has been found to be most successful in the case of the Professorship of Political Economy in Trinity College, Dublin, founded by Archbishop Whately. I might also add that the Royal Irish Academy and the Royal Archaeological Society could do a great deal to direct the attention of students to Celtic by subscribing a yearly sum for prizes in the colleges. There is not a session in which students able to speak Irish do not enter in Dublin, Cork, and Galway, but they have little interest and no inducement to keep up their knowledge, much less enter upon a special course of study. Though it is not desirable to encourage Irish as a vernacular, there can be no reason why in the national schools it should not be placed on the same level as Latin and French, and result fees given for proficiency in it. These proposals are not more than may be fairly asked, and they would, in due time, provide in Ireland a good school of young Celtic philologists.

## HOME AND FOREIGN NOTES.

ARCHÆOLOGICAL.—The British Archæological Society will hold their annual meeting in August at Langgollen.

BUILDING DISPUTES.—Several disputes still continue in the building branches in England and Scotland in the matters of a rise of wages and the shortening of the hours of labour.

ACCIDENT.—On the 4th inst., at the Marble Works of Messrs. Sibthorpe and Son, Great Brunswick-street, a sawyer named Terence Curry met his death very suddenly. It appears he was standing in a pit between two blocks of marble, which were being cut through by means of saws worked by steam. A portion of one of the blocks which he had apparently neglected to notice had been cut through, and which weighed about a ton, fell over against him, crushing him severely. He expired on the following morning.

GREAT SHIP-BUILDING "LOCK-OUT."—On Friday last, in Glasgow, at the largest meeting ever held of Clyde shipbuilders, it was unanimously resolved, in consequence of the strike of the Clyde shipwrights for an advance of 15 per cent. in their wages, that there should be a general lock-out, to take effect on the 19th. This includes all the yards in Glasgow, Greenock, Port Glasgow, and Dumbarton. 30,000 men will be thrown idle. The masters, it is stated, are determined, having refused all contracts for two months.

THE GERMAN LAW OF PATENTS.—The *Engineer*, in remarking upon the bill for the amendment of the German Patent Law which has passed the German Parliament, observes:—"It is a great improvement upon that hitherto in force. As matters now stand, patents will be granted for fifteen years, the longest theoretical period for which a grant could be made under the former Prussian law. We say 'theoretical' period, because, as is well known, it was not the practice to grant a patent for more than two or three years. An applicant will now obtain an equivalent for our provisional protection, upon making his application and giving discovery to the authorities of his invention. The subject matter of the application will then be referred to a board of examiners, by whom it must be admitted to be new. The

examiners will at first make their own examination, after which, if necessary, they may be assisted by the inventor, who will have an opportunity of bringing evidence upon the subject. Thus, it will be seen, it is intended to afford an inventor all possible facility for carrying his point. If the examination prove satisfactory, a patent will be granted, which will be subject to a condition that the invention must be carried into operation within three years. It is pleasant to find the principle of reward for invention so fully approved in a country which not long ago pronounced so strongly against it."

## TO CORRESPONDENTS.

A STUDENT.—The great body of the works in Marsh's Library are of a theological character, still there are several good London and Dublin editions of works printed in the last century, and written by native authors. The library is a free one.

BUILDING REPRESENTATION.—The building element was for many years largely represented in the old corporation of this city, several members connected with the building trades being members and so-called architects according to the fashion of the time.

UNDERTAKERS v. ARCHITECTS.—There are many speculating builders both in the sister kingdom and this, who are undertakers, auctioneers, surveyors, and architects, bless the mark! Their dual and tripartite callings are profitable ones, and what could be more meet than that a "Jerry" builder should be an undertaker, considering the character of his houses, "Built to sell and to kill?"

RECEIVED.—R. E. (Will be considered).—An Apprentice.—W. B. C.—J. P.—Assistant Surveyor (Yes).—Tolka.—W. & Co. (London).—G. M. (do.).—Town Commissioner (Kings-town).—Thanks.—E. B.—An Operative.—S. A.—T.C., &c.

EPPS'S COCOA.—Some time since, in a series of articles in these columns upon food, we spoke in terms of unqualified praise of Messrs. Epps and Co's "Prepared Cocoa." The opinion we then expressed as to its purity and nutritious qualities has been fully endorsed by the public, as shown in its increased and steadily increasing consumption. We believe that Messrs. Epps's Manufactories are now the largest of the kind in the three kingdoms, and the total quantity of "Prepared Cocoa" consumed at the present time approaches four millions of pounds annually. This result is not surprising. The dietetic properties of native cocoa are well known, but in the form prepared by Messrs. Epps, Homœopathic Chemists, they are rendered additionally valuable, both on account of their increased nutritive power and digestible character.—*Civil Service Gazette*.

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## THE IRISH BUILDER.

VOL. XIX.—No. 419.

RIDING THE FRANCHISES—  
ANCIENT AND MODERN.

## FIRST PART.

HERE is scarcely a citizen in our midst—unless he be more than a centenarian—who can have any distinct recollection of the old city pageant and perambulation known as "The Riding of the Franchises." The pageant proper to which we allude was ridden triennially in Dublin till about the year 1772, when it was abolished by the Lord Mayor's proclamation. Perambulations subsequently for some years took place, but they were only the shadow of the former, and the shadow of this shadow is only to be seen now in the annual show when the new Lord Mayor is taking office. Many years, indeed, have passed since the citizens of Dublin beheld their chief magistrate, sheriffs, satellites, and the numerous groups of respective Corporate minor guilds of trade working at their different branches of trade or handicraft upon wagons or huge high carriages decked with flags, streamers, and evergreens, much to the pleasure of the fun and show-loving citizens.

A wish was expressed lately to revive the Riding of the Franchises or liberties of the city to some extent by having a perambulation, and, we believe, it was intimated that the present Lord Mayor intended, or was anxious, to renew the old civic pageant and custom. In London, the Lord Mayor's yearly show is one of garish display; but it, too, is shorn of its olden and elaborate details. Many English provincial corporations still keep up their pageant and perambulations on a minor scale; and even the vestry boards of the London metropolis keep up the old custom of yearly "beating the bounds." In the City of London yearly, in certain parishes, the sight may be seen of a number of boys from schools and other institutions, accompanied by guardians and parish representatives, perambulating the bounds of the parish, and

with their rods giving a number of good "whacks" to the boundary stones or walls.

As there are many at the present day unacquainted with the nature and origin of the old civic customs in Dublin and its surroundings in later times, we will, as we proceed, give a comprehensive account of it, and in doing so we must, at least, go back for several centuries. Prince John, second son of Henry, created Lord of Ireland by his father, granted to the city of Dublin freedom and liberties by a Charter of Franchise and Immunities *per totam terram et potestatem meam* to be held by him and his heirs. This Charter contains other grants and matters which are not necessary here to enumerate in detail. This appears to be the earliest instrument that occurs, and it bears date, London, the 14th of May, in the third year of the reign of his brother Richard I., 1192; but it refers to a former Charter of local franchise granted by Henry II., now lost. The Charter of King John is contained in the Black Book of the Archbishop of Dublin, entitled, "Alen's Register," having been collected by the Archbishop of that name in the reign of Henry VIII. The following portion is given as a translation of the original Latin, and refers to the bounds and franchises of the city of Dublin and liberties thereof:—

"John, Lord of Ireland, Earl of Morton, to all his subjects and friends, French, English, Irish, and Welsh, present and to come, greeting: Know ye, that I have given and granted, and by this my Charter confirmed to my citizens of Dublin, as well as those who inhabit without the walls, as to those who dwell within them, as far as the boundary of the town, that they may have their limits, as they were perambulated by the oaths of the honest men of the city itself, in pursuance of a precept sent to them by King Henry my father, namely, on the east and south sides of Dublin, by the pasture grounds which lead as far as the gate of St. Kevin's Church, and so along the road as far as Kilmerkerigan, and from thence as they are divided from the lands of Donenobrooge [Donnybrook] as far as the Doder, and from the Doder to the sea, namely, to Clorade close to the sea, and from Clorade as far as Ramynelar. And on the west side of Dublin, from St. Patrick's Church through the valley as far as Farnan-Clenegemethe, and from thence as they are divided from the lands of Kilmmainam, and beyond the water of Kilmmainam, near Avenliffey, towards the mouth of Cnocknogannoe, and from thence as far as the barns of the Holy Trinity, and from those barns to the Gallows, and so as the division runs between Clonlee and Crynan, as far as Tolecan, and afterwards to the Church of St. Mary of Ostmanby. These things we have also granted to them that their tenures and land be secure, who have any granted to them in our Charter, from thence without the walls as far as the before-mentioned limits, that the city may not dispose of those lands as of other lands, but that they observe the common customs of the city, as other citizens do. But this we declare of those who have had our Charter of certain lands, within the said limits, without the walls, before we had granted the aforesaid liberties and this Charter."

The above instrument is stated in a rather general than specific form; and to trace the exact bounds of the city from it at the time would be most difficult. It will be observed that it broke off at the Church of St. Mary of Ostmanby, leaving the circuit broken, or incomplete. The defect, however, is in some measure supplied from an inspeimus of an inquisition quoted in the book above alluded to, taken in the reign of Richard II., entitled "De Metis Libertatum pre Novum Inquisitionem," i.e., "Concerning the bounds of the Franchises of the City by a new Inquisition." It will be seen hereafter how much the following differs from the more modern perambulations of the city which were in practice in the last century.

"Richard, by the Grace of God, King of England and France, and Lord of Ireland, to all whom

these letters shall come, greeting. We have viewed, &c., &c. It has been shewn to us on the part of the Mayor and Community of the City of Dublin, &c., and jurors upon their oaths say, that the bounds of the City of Dublin are on the east part of Dublin, and on the south part thereof, namely, the pasture leading to the port of St. Kevin, and so by the road as far as Kilmecreagran, and from thence as they are divided from the lands of Donenobrooge to the Doder, and from the Doder to the sea, namely, Clarada, near the sea, and from Clarada to Reymlan, and from the port of St. Kevin's Church by the way northward to a stone cross where the eastern market anciently used to be kept, towards the west, and from thence to a lane near St. Sepulchre's in the passage towards a barn as far as to a certain old lane closed up, near to the Commons of the Vicars of St. Patrick's Church, which extend to St. Patrick's street; and in the west part of Dublin, from St. Patrick's Church, through the middle of the valley to the pool of the house of St. Thomas the Martyr, leaving the south gate of the Monasteries of Whiteschan and Conelan towards the north on the left hand, and exactly through the middle of the depth of the said pool through the middle of the meadow, leading to a pasture called le Irendum, towards the north, and from le Irendum to the Cross of Kilmmainam, by the bounds of the land of Kilmaynan, and from the said cross along the bounds of the lands of Kilmaynan, to a ford called Tyrrel's Ford, and from that ford, between the lands of the Church of the Holy Trinity, Dublin, and the lands of Kilmmainam, unto the water of Annliffy, towards the north by Enolnegannocke, passing into a meadow which leads towards the west as far as the highway, passing from Dublin towards Carberagh; and from thence to the barns of the Holy Trinity, and from those barns, along the trench called Rugh-ditch to the highway leading from Finglas to the city, leaving the said trench on the left hand towards the north, and from that highway to the water of Glasteynocke, and so to a hill towards the north where the gallows anciently stood, and from thence through the middle of the water of Glasteynocke, to the highway leading from the said city towards Santreff, and beyond that highway as far as the trench of the land of Clonliffy, and so along that trench to a green lying on the north side of the abbottical house of St. Mary, Dublin; and thence between the green and the said trench to the middle of the highway leading from Ostmantown to Tulquin, through the middle of the road to the village of Ballybough, unto an ancient path of an old mill, leaving the abbey of Lexinam on the right hand towards the south, and the trench and path on the left hand towards the north, and so along the water of Anliffy to the Abbey of the Blessed Virgin Mary of Ostmanby," &c.

The above description is very specific, and in its light we are enabled to trace the many historic places north and south of the Liffey. In this perambulation many old commons, crosses, trenches, rivers and rivulets, pools, fords, barns, greens, and bye-lanes, were passed, several of which have disappeared in the course of centuries. Places known to us to-day under new or altered names, appear in the above description under their more ancient form. The Liffey and its tributaries, the Dodder, the Poddle, the Camac, the Bradogue, the Tolka, and others were crossed; and other smaller streams, some of which are long closed over by modern streets and buildings. We catch olden glimpses of Donnybrook, Irishtown, Ringsend, and adjacent hamlets; Kilmmainam, Island Bridge, the Long Meadow, Arbour Hill, Oxmantown, Stoneybatter, Glassmanogue, Glasnevin, Finglas, Drumcondra, Santry, Clontarf, Ballybough, and several other spots north and south of the city, as well as other places that need not be named, in the centre or within the confines of the old city.

Several ancient stone crosses must have existed formerly in the City of Dublin and its environs. In the above-quoted document we have mention of one where "the eastern market anciently used to be kept," in the old city; and in the environs we have mention of the cross of Kilmmainam. Doubtless there was a cross at the old hamlet of Harold's Cross, and other southern and



northern approaches to the city. In Speed's map of 1610, a copy of which is given in Malton's "Views of Dublin," there is a stone cross figured outside the precincts of St. Mary's Abbey, in one of the approaches of the northern part of the city, or that portion adjoining Ostmantown or Oxmantown. Whether the Finglas Cross, in the churchyard of that historic village, was intended for a sepulchral one, or was anciently a market or town one, it is difficult to determine now, as no figures or dates remain upon its surface through which it might be identified as belonging to either class.

In the first-quoted Charter of John, the words "the barns of the Holy Trinity, and from these barns to the gallows," occur, and in the second document these barns and gallows are again mentioned; but in a more precise manner as to their locality:—"Passing from Dublin to Caberagh [Cabra], and from thence to the barns of the Holy Trinity, and from these barns, along a trench called Rugh-ditch, to the highway leading from Finglas to the city, leaving the said trench on the left hand towards the north; and from that highway to the water of Glasteynock, and so to a hill towards the north where the gallows anciently stood; and thence through the middle of the water of Glasteynock to the highway leading from the said city towards Santreff" [Santry]. The waters of Glasteynock may be recognised as the Tolka, the Tolecan, or the Tullaghan, by which names it has at different times been known. The Tolka has also often been called the Fluglas river, the Glasnevin or Ballybough river, according to the localities it passes through. Speaking of barns and gibbets, the name of Dolphin's Barn and Gallows Green occur to our mind—two spots well-known—though the latter place is better known at present under the name of St. Stephen's-green. A quarry of building stone was worked successfully in the last century near St. Stephen's-green, and the gallows existed, or was erected when required, a little beyond.

By the aid of the above Charter we may also identify the sites and localities of several ancient commons, greens, and open spaces that existed in olden Dublin, upon which the public exercised certain grazing and recreative rights and privileges. Alas! they have nearly all disappeared, having been filched from time to time from the people of Dublin by manor lords and others. In our next article we will give an account of the more modern manner of surveying and perambulating the city liberties every third year, previous to 1772, and the subsequent method adopted by the City Fathers after that date, with other associations connected with "Riding the Franchises" in Dublin.

#### ANCIENT BUILDING SOCIETIES IN DUBLIN.

DURING the late month, some comments having been made in a daily contemporary on Building Societies in general, and the "Irish Civil Service Permanent Building Society" in particular, backed up with a very suspicious correspondence, Mr. Alfred H. Mercer, the Secretary of the latter society, addressed a letter refuting some of the statements of the journal in question. The reply of Mr. Mercer having been printed in a garbled and abbreviated form, he felt it necessary to address a correct copy of it to another morning contemporary. Although we were the first, long since, to take exception to the

system adopted by the Irish Civil Service Building Society, and at different times again and again returned to the subject, we think it is only honourable and just that Mr. Mercer's statements should get full publicity. However mistaken his views, or incomplete his answer may be, it is the duty of a public journalist who has criticised the actions of his society, to afford him fair play. If a journalist or other person desires to bring grist to his own mill, he is at liberty to do so; but in canvassing for his own or his firm's interest, it is not necessary that he should canvass unfairly against the interest of others. We extend to Mr. Mercer further publicity for his letter, although we do not think he has proven, or can prove, that the "Irish Civil Service Building Society" is really and truly what it professes to be—a veritable and practical building society, for readily enabling working men to become owners of their houses.

The following is Mr. Mercer's letter:—

"Since you have pointedly referred to the Irish Civil Society in your article of yesterday on Building Societies in Ireland, I feel it due to its directors and shareholders to controvert your statements, and to show by a few facts that we have carried out the principles and objects which you advocate. Outside our ordinary mortgage transactions we can point to nearly 1,000 cases in which we have enabled our members to become proprietors—the mechanic acquiring his cottage, the farmer his farm, the tradesman his shop, the official and the professional man his house, &c. As regards the rate of interest, our maximum rate is seven per cent., and our minimum five per cent., so that your study of our prospectus and last report must have been very cursory, or you would not have failed to perceive that your conclusion as to how the good dividends have been earned is totally incorrect; and that you might, with the same show of reason, assume that because the local banks pay dividends of from ten to fifteen per cent to their shareholders, their borrowers pay them that high rate, the explanation being that they have the use of a large amount of deposits at a low rate of interest. Now, that is precisely our case, as the public has shown its confidence in us by entrusting to the society deposits to the extent of £175,000 at three per cent., which enables us to make advances at a low rate, while giving our investors a good dividend. This society has already advanced £600,000, which in itself proves that its rate, so far from being excessive, must be liberal in order to attract so large a share of business; and I may add that the highest legal tribunal in Ireland, in pronouncing judgment recently on an important case affecting the society, stated, that they found its rules to have been framed in a spirit evidencing the utmost care for the interests of the borrower."

The Irish Civil Service Building Society has certainly paid some very good dividends, earned by high rates of interest charged upon advances in respect to mortgage securities; and also by profits through judicious investments. But we desire to see a better system than a mere loan office or financial agency; a system in which the humblest member will directly participate. A working man or poor clerk should be enabled to secure his house by the payment of easy or small instalments. The Irish Civil Service Building Society is not, however, the only sinner; but as it has been pointed to by its well-wishers as an instance of a successful building society, it is only right that the public should be informed what it really is, and what constitutes its strength. It is not long since a commission reported upon the working of Building Societies in this country as well as in England, and at the time we reviewed the evidence given. We remember well that some exceptions were taken to our remarks by a chairman, director, or other officer of the Irish Civil Service Building Society; but if the Blue Book be referred to, our remarks will be confirmed.

In the beginning of last year we had occasion to refer again to building societies, and in the short article headed "Permanent Building Societies," we wrote as follows:—

"What is a Building Society? and, again, What is a Permanent Building Society? Two or three years ago we discussed some bearings of the question, and we hoped by this time that one of the

societies which we passed under notice would become what it proclaimed itself to be. The Irish Civil Service (Permanent) Building Society, according to its annual reports, appears to be a prosperous concern, but we have looked in vain to find its results in a building direction. It is simply, as far as we can see, a big loan fund society, but a *bona fide* Building Society it is not. Some, or several of its members, for aught we know, may be jobbing builders, and the society may be very useful to this class of men to enable them to borrow money for wages or materials. If such transactions take place, we have nothing to say just now against such an obliging system, but we contend that a loan fund that tacks on other duties such as that performed by money lenders, appraisers and valuers, conveyancers, &c., without troubling itself whether its members build, or others wishing to join want to build—a society of this kind is neither a temporary nor permanent Building Society, in fact it is not a Building Society at all. At this hour of the day it is needless to tell the public what constitutes a Building Society, and for what purpose they were established. We wish no harm to the Irish Civil Service Society—it is doing good for some people, but if it ever intends to be a Building Society, we must say it seems to have forgotten the *raison d'être* which it should give for its existence."

In conclusion, let us plainly and openly state, that we are not personally interested in the success of any particular Building Society; nor do we wish to see any speculative concern raised on the ruins of the Civil Service Permanent Building Society, or even to its damage. We know a good deal about the working and history of Building Societies in the sister kingdom as well as in this country, and we would warn our artisans, clerks, and workmen in general, to be cautious and not be led astray by skillfully worded prospectuses, and specious promises, or anonymous or mythical correspondence, to part with their money. Some men desire money—other men are covetous for public popularity and political capital; but the industrious working man who is anxious to keep clear of shoals, should not join any Building Society or other industrial enterprise likely to be utilised for political ends.

As journalists, we have a duty to perform, and have always endeavoured to honestly do it; and journals, political as well as professional, ought to be jealous of their reputation, supposing they have a good one. There are, however, journalists and journalists, and in our midst there are some who endeavour to dictate public opinion, forgetting that while it is their province to dare to speak, they should at the same time hold themselves amenable to the public will. The "Signs of the Times" are to be often seen in these "coming events that cast their shadows before," and to all whom it may concern, perhaps our words will act as a "timely warning."

This society, we opine, is composed principally of the middle classes, well-to-do traders, Government clerks, and other officials in receipt of good salaries; professional gentlemen, including architects, engineers, and surveyors; but we fear a very, very small sprinkling of *bona fide* working men. We would like to be informed by Mr. Mercer, or some other officer or shareholder, how many mechanics have obtained their houses, or peasant proprietors their farms, through the agency of the Irish Civil Service Building Society, during the last ten or seven years. The statistics would be interesting and useful on this head, and our pages will be willingly opened to afford the public the information. We have no desire to weaken the society, but to strengthen it; but we think that the system by which it is governed ought to be reformed. If the Irish Civil Service Building Society be re-organised, and made what it should be—a real building society and not a nominal one, or nearly so, it shall receive every support at our hands.

[As we go to press we learn that a meeting is announced to be held at the Commercial Buildings this afternoon, to consider "the desirability of establishing a Mutual Benefit Building Society on a plan hitherto untried in this city."]



## OBITUARY.

EDMUND SHARPE, M.A., AND SIR MATTHEW DIGBY WYATT, ARCHITECTS.

Two architects and architectural writers of acknowledged reputation have passed away during the late month, whose lives were rife with activity, and who worked till the last, or while health and strength remained. Mr. Edmund Sharpe, who died abroad at Milan, on the 8th of May, where he had gone to carry out his much-loved work of sketching and illustrating ancient buildings, was in his 68th year, having been born in 1809 at Knutsford. During his most active and useful life Mr. Sharpe produced a most remarkable series of illustrative works of an architectural and archaeological character. Some of these were produced before he relinquished the practice of his profession, but the majority subsequently. In his volumes under the title of "Architectural Parallels," he illustrated numerous English churches. This work was published as far back as 1848, and shortly after was published his "Rise and Progress of Decorated Window Tracery." In 1851 appeared an excellent volume, entitled the "Seven Periods of Gothic Architecture." A second edition of the above work was issued in 1861, and also a volume containing his papers on Chichester Cathedral and Boxgrove and Shoreham Churches. In 1871 commenced a series of works published in parts, one of these being "The Mouldings of the Six Periods of Architecture." Nearly at the same time appeared "The Ornamentation of the Transitional Period." Indeed, Mr. Sharpe's activity was such that he kept publishing two or three series of architectural works at the same time. In 1874 his very interesting work of "The Architecture of the Cistercians" was published. He also issued "Four Letters on Colour in Churches," which originally appeared in our contemporary the *Builder*. In 1875 the gold medal of the Royal Institute of British Architects was awarded to Mr. Sharpe. In Lancaster, where he resided and settled down as far back as 1836, he filled several offices, was a member of the Town Council, and was a mayor in 1848, and in subsequent years. Mr. Sharpe's loss will be felt, and by none more than the members of the Architectural Association of London, many of whom were devotedly attached to him, and accompanied him in several of their annual excursions to ancient buildings and churches, which he inaugurated, and which resulted in much valuable architectural illustrations. Mr. Sharpe was an admirable lecturer and illustrator; and on the occasion of the Conference last year we listened with pleasure and delight to one of his papers, a short summary of which will be found in our last year's volume. This was the last occasion on which we saw him, whose death his countrymen and the architectural profession must deplore, and we join issue with them in sincerely regretting that he was not spared for some years longer to add to the obligations that his architectural brethren are under to him.

SIR MATTHEW DIGBY WYATT.

By the death of this esteemed architect and gentleman a severe loss will also be sustained by the architectural profession. Sir Matthew Digby Wyatt was born near Devizes in 1820, and his useful life was cut short by a rather long illness, which ended in his death, on the 21st ult., at Dimlands, Cowbridge, Glamorganshire. Sir Digby studied his profession in the office of his brother and on the Continent, having made a tour in 1844 through France, Italy, Sicily, and Germany. Some time after his return to England he published "Specimens of the Geometrical Mosaics of the Middle Ages." He restored and re-decorated the Adelphi Theatre in 1848, which building was afterwards taken down. He contributed in the mean time several articles to the Press on Art subjects, and was appointed by the Society of Arts as a member of the Commission to report upon the Paris Exposition of Industry. He acted as

one of the Royal Commissioners, and took an active part in the arrangements of the great Exhibition of 1851. In the re-construction of the Crystal Palace he acted in concert with the late Mr. Owen Jones, and both were deputed on the mission to collect works upon the Continent. Under Sir Digby's direction were constructed the Byzantine, Mediæval, Renaissance, and Italian Courts, and other works, the handbook of which he assisted in preparing. One of his architectural works was the new India Office, of which he undertook the decorative portion, the structural being entrusted to Sir Gilbert Scott. He also executed several commissions for manor houses, domestic residences, memorial arches, mausoleums, and a variety of other buildings. Amongst this eminent architect's other literary productions are "The Industrial Arts of the Nineteenth Century," "Notes of Sculpture in Ivory," "Metal Work and its Artistic Designs," and the articles on "Renaissance" and "Italian Ornament" for Owen Jones's "Grammar of Ornament." Sir Digby was a Fellow of the Royal and Antiquarian societies. It may not be amiss to add here that in his "Art of Illumination" the late distinguished architect gives great credit to this country by saying, that it is to Ireland that the rich style of monumental ornamentation is due, and also that Irish Art was original.—Peace be to his ashes.

## THE NATIONAL MONUMENTS OF IRELAND.

As we gave in our No. of the 1st September last an abstract of Mr. Deane's report on the works at the Rock of Cashel, and also reprinted recently his letter to the papers on those executed at Glendalough, it will be only necessary at present to give our readers the following additional paragraphs from Mr. Brien's paper, in which he refers to the remains at Ardmore, Ardfert, Monasterboice, &c.:—

As respects *Ardmore Cathedral* and *Round Tower*, the works undertaken have been completed. The Round Tower (the highest and most perfect in Ireland) was in a dangerous condition. The conical top and upper storey seemed to have been struck by lightning; the portions damaged were taken down, the stones numbered and re-used, the tower has been pointed in cement, and the modern timber floors repaired. The Cathedral has also been repaired; the walls grouted with cement concrete; the quoins of south angle rebuilt; the sculpture at west end secured in position; one of the missing figures was found amongst the *débris* at the foot of the tower, and has been replaced in position; the modern filling of the north doorway removed, and the ancient arch stairs, which were found complete, have been replaced.

*Ardfert Cathedral* was 137 ft. long by 25 ft. broad, and dedicated to St. Brendan; date, 1250. The aisle, transept, and chantry appear to have been erected subsequently; at the west end are the doorway and arcaded wall of more ancient building; eastern end three-light window centre-lights, nearly 30 ft. by 2 ft.; two blank arcades at side. The southern wall and eastern gable were in a dangerous condition; a flying buttress has been erected, which secures the safety of this arcade; the gable has been pinned with stone; bond stones put in at dangerous cracks; walls pointed with cement, and tops grouted with concrete. Works of a similar nature at the other churches—graveyard levelled in places, and a caretaker appointed.

*Monasterboice*. The walls of tower have been repaired; one of the stone crosses re-erected; walls of churches pointed with cement; ground levelled; caretaker appointed.

*Devenish Island, Lough Erne*—Round Tower and ruins of two churches—works in progress.

Mr. Deane, at the end of his report, regrets that other objects have not yet received the attention accorded to those

in his charge; and I believe that the Church Temporalities Commissioners have been very strongly urged on all sides to considerably extend the list of buildings transferred to the Board of Works. Amongst others the following are represented as claiming attention—we have been referring to most of them this evening:—Killaloe, Clonmacnoise; Inniscarra; Scattery Island; Kilmacduagh; Kilmalkedar; Drumcliff (Sligo); Dysert; Arboe (Lough Neagh); Aghadoe, near Killarney; Ratass Cathedral, near Tralee; Donoughmore Church, near Clonmel; St. Cronan's, Roscrea; Killeslin, near Carlow; Monaincha, Roscrea; Aghavilla (county Kilkenny); White Island (Lough Erne); Doullane (Meath); Innismanny Island (Sligo); Mollagga (county Cork); Inchgoyle (Lough Corrib).

## A BARDIC MEMORIAL.

It is not every poet or rhymist, however clever, who has been honoured with a tombstone or even a painted epitaph upon a deal board. A noted rebus writer, fallen upon gloomy days, died recently within the walls of the Naas Workhouse, has found a number of humble admirers anxious to do honour to his genius and memory, though he died a pauper bard. We have it written of the author of the "Iliad" and the "Odyssey" that seven famous cities contested for Homer dead, through which the living Homer begged his bread. Let us hope that the humble bard whose proposed memorial is the subject of the following letter, which has been addressed to the Board of Guardians of the Naas Union, has found a little practical sympathy in life on the part of those who are testifying to his abilities above his grave:—

"25, Patrick-street, Dublin,  
May 9, 1877.

"GENTLEMEN,—The celebrated rebus writer, D. B. O'Sullivan, having in November last died an inmate of your union, and being buried in the cemetery grounds attached to same, on behalf of a few of the deceased poet's admirers and sympathising friends, I most respectfully ask if your board will be pleased to accord us the privilege of erecting some little limestone slab with granite basement, for the purpose of marking the place where repose the remains of that truly gifted, but ill-fated bard. I have already heard from a member of your board, Mr. Driver, that your board, through him, had in January last, given your sanction for us to erect the little monument in your grounds; but on consultation with my friends we have thought it better to make this formal request, so that there may be no mistake in the matter whatever day we go out from Dublin for that purpose. Hoping that your board will be pleased to allow us to perpetuate the memory of the great D. B. O'Sullivan, though even within the precincts of an union workhouse, I remain, gentlemen, your most obedient servant,

JOHN M'CALL, Treasurer of the  
D.B.O.S. Memorial Fund."

The Clerk said, upon the application of Mr. Patrick Driver, the same permission was granted before. An order was made confirming the permission already granted.

## THE ROYAL IRISH ACADEMY.

A MEETING of the Academy took place on Monday evening,

Sir ROBERT KANE in the chair.

Samuel Ferguson, Esq., LL.D., V.P., read a paper "On Breton and Norse Rock Sculpture." In the course of his remarks he described this sculpture, and contrasted the forms of canoes and other vessels represented by it with those of various nations, and especially drew a comparison with them and the Roman galleys of Classic times. The author was of opinion that the vessels represented were of the most primitive type. He was inclined to think that these ancient canoes had outriggers; and that theory was supported by the appearance presented by an ancient canoe found in Lough Owel, and now in the crypt of the Academy. An adaptation of the outrigger arrangement would enable the rowers to work more conveniently than according to the plans hitherto accepted. The paper was referred to the Council for publication.



# INSTITUTION OF CIVIL ENGINEERS, LONDON.

## ANNUAL CONVERSAZIONE.

(BY SPECIAL TELEGRAM.)

THE annual conversazione of the Institution of Civil Engineers was held last night in South Kensington Museum, at which the President and Mrs. Stephenson received the members and their friends. It was fully equal in brilliancy to those we witnessed previously, and evidenced in the highest degree the spirit of brotherhood and hospitality that characterises this Engineering body. The first reception-room was the throne-room of Akbar Khan, in the Indian Architectural Court. This room was decorated with azalias and palms; and the whole of the galleries and halls were open to the guests, and brilliantly illuminated. There was a very large and distinguished gathering, noble, gentry, and professional men, distinguished in art and science; we cannot attempt to even enumerate the more remarkable. Several Engineering models were exhibited, and among them one possessing a peculiar interest at this time. It consisted of a tube designed for passing food and messages written in phosphorus through a mass of coal to miners entombed in choked borings, with a valve to prevent a rush of compressed air. The collections recently added to the Museum, through the bequests of Mr. John Forster and the Rev. Alexander Dyce, attracted considerable attention on the part of the guests, as did other objects of art and models recently added. We noted on former occasions that these annual gatherings, and the hospitalities they necessitate, must entail a large outlay; and we trust—indeed we have no doubt—they are appreciated, taken with all their surroundings. The enterprise exhibited in other directions by the Civil Engineers bespeaks powerfully of the influence which is exerted of late years by that distinguished body. The music at the *conversazione* was that of the string band of the Royal Engineers. Exigencies, and the date of our publication, prevent us from giving more than the above brief report on this occasion.

## THE WATER SUPPLY TO THE NORTH DUBLIN UNION WORKHOUSE.

At a meeting of the Guardians of the North Dublin Union on the 23rd ult., a communication from the Local Government Board was read, calling the attention of the guardians to a letter on the water supply to the workhouse which appeared in the *IRISH BUILDER* of the 15th ult. "The communication was ordered to be marked read," but before it was so honoured, one of the guardians is reported to have stated that the water supplied for the use of the inmates of the poorhouse was superior to any used in Dublin, and that the death-rate was higher in the South than in the North Union.

No one who ever looked at the almost stagnant pool (the "Turf Harbour") from which the water supplied to the poorhouse is taken—who has seen the bloated, putrid carcases of dead dogs and cats floating thereon, coupled with the addition of bilge water, &c., from the boats, can by any stretch of credulity believe the first of those statements. A knowledge of the fact that all the diseased cattle have been killed in the South Union, and the diseased meat (some of which would not be given to the beasts in the Zoological Gardens) was sold to the poor of the south side of the city, may help those who take an interest in the matter in believing the second.—J. K.

## "THE HOPE (FORLORN) OF ARCHITECTURE."

A DOLEFUL DITTY.

Architects, Architects, out and about—  
What is the Shibboleth, what is the shout?  
Gothic or Classic, or goody Queen Anne?  
Answer my queries—that's if you can.

Architects, Architects, loaded with crimes,  
Badger'd by parsons and lawyers and *Times*,  
Classic or Gothic, in freestone or brick?  
What is the Shibboleth? answer me quick.

Architects, Architects, what is the Hope  
Of Time that's to come with which you've to cope?  
Gothic or Classic, or red brick Queen Anne?  
Plotted and built by the great Working-Man.

Architects, Architects, noisy or mute,  
Outsiders or Dons of the big Institute—  
What is the Shibboleth? Orders or Styles?  
Columns or domes, or long-drawn aisles?

Architects, Architects, shut up your shops,  
The Stone-age is gone and Iron out-crops;  
Clear out at once, for the swift-rushing tide  
Of Iron rolls on in magnetic oxide.

Architects, Architects, die out you must;  
Engineers say so, since Iron won't rust!  
I'm likely to live and see the last man  
Buried, who built in the Style of Queen Anne!

C. H. C.

## GENTLEMANLY JOURNALISTS— WHICH?

THE WORKHOUSE WATER SUPPLY.

A LETTER having appeared in our last issue on the water supply of the North Dublin Union Workhouse, the subject came up for discussion at the meeting of the Guardians on the 23rd ult. The proceedings are thus reported in two of our morning journals:—

*Daily Express.*

A letter was read from the Local Government Board enclosing a letter written to them by Mr. James Kirby, of Peter's-row, directing their attention to a letter published by him in the *IRISH BUILDER* of May 15th as to the water supply of the workhouse. He stated that the supply was taken from a portion of the Royal Canal, situated behind Constitution Hill, called the "turf harbour," and that it was so impure it would not be supplied to the criminals in the adjoining prison, which the guardians must have known. This, coupled with the sale of diseased meat to the poor, might, he thought, to some extent, account for the increasing death rate in Dublin. Mr. Tickell said the death rate in the North Dublin Union compared favourably with that of the South Dublin Union where Varry water alone was used. The Chairman said there was an extraordinary difference between the death rates of the two unions, the difference being altogether in favour of the North Union. The letter was marked read.

*Irish Times.*

Attention was drawn to a letter signed "James Kirby," which appeared in [a small Dublin weekly paper], condemning the "philanthropic board for procuring what the writer called an impure water supply from the canal, and which, he asserted, might account to some extent for the high death rate in Dublin. It was pointed out that the water supply was one of the best in the city, and that the death rate was lower here than in the South Union, where only the soft Varry water was used. The matter then dropped.

The reader will not fail to take note of the sneer and falsehood contained in the words we have included in bracket in the *small weakly* report above cited. Dublin journals were formerly, as a whole, edited by gentlemen and scholars, and their staff—such as editors and reporters—designated "the gentlemen of the Press." Concerning the "small weakly (*sic*) paper" this much may be allowed with truth, that it has always given its readers value for their money in quality as against quantity in the pinchbeck organ, and its conductors have never permitted it to be utilised for the interests of professional quacks, much less political ones. Degeneracy and demoralization, we fear, has been setting in for some time, and shallow "snobs" are allowed to usurp the functions of educated gentlemen on our daily and weekly newspapers. We have several times of late years endeavoured to shame some journals in this city into a sense of the duties and responsibilities, and force them to purge and purify their pages by eliminating quackery and obscenity; but what has been bred in the bone is hard to get out of the flesh. Some journalistic

folks have, however, smarted under our just rebuke for their tricks and mock sanitary advocacy and sensationalism, and they do not forget, and possibly they will never forgive us. In their low cunning they are always overleaping themselves; but what can be expected from a journal whose blurred and chequered history for several years has stunk in the nostrils of a large majority of our people?

## THE "MEADOWS TAYLOR" MEMORIAL.

A HANDSOME mural tablet, together with four painted glass windows by a foreign artist, have been erected in Harold's Cross Church, as a memorial to the late Col. Meadows Taylor, C.S.I. The inscription on the tablet is as follows:—

This Tablet,  
Together with Four Memorial Windows,  
And a Choir Organ  
Are erected  
As a slight expression of the very great regard felt,  
For the late  
COLONEL MEADOWS TAYLOR, C.S.I.,  
Of Oldcourt, Harold's Cross,  
By those who loved and admired him;  
He was an accomplished scholar, a gifted author,  
An able administrator, a gentle ruler,  
A valiant soldier, a faithful friend;  
He died at Mentone, May 13th, 1876,  
In the 67th year of his age.  
His end was peace, and his last words were—  
"Underneath are the everlasting arms."  
Deut. xxxiii. 27.

Sundry works of improvement have been carried out in the fabric; the organ has been overhauled and enlarged by an English firm, and is said to be now a remarkably fine instrument. The old-fashioned square pews have been replaced by open benches in selected pitch pine, by Messrs. Beckett; the painting has been executed by Messrs. Dobson; and handsome brass gas standards were supplied by Messrs. Curtis. The entire of the improvements to this church have been carried out under the superintendence of Mr. E. T. Owen, architect.

## THE IRISH BRICK-MAKING TRADE.

THE *Leinster Express* in commenting upon the recent case in Athy, where the magistrates had to adjudicate on a summons at the suit of a brickmaker against a man who had been engaged as what is known as an "up-sticker," and who refused to fulfil the terms of an agreement he signed when accepting the situation, observes:—

"The Irish-brick-making trade has already enough to do to hold its own against English competition; and if Irish employers are perpetually embarrassed by the misconduct of their men, another of the few industries remaining in this country will quickly disappear from among us. It is only by the adherence of the employed to their engagements that the employers can fulfil their contracts with profit. If the employers' calculations are to be upset, and their arrangements frustrated by their men, the former will soon discover some more profitable business in which to invest their capital. The vitality of the brick-making trade is particularly uncertain, for this reason, that the owners of brick-yards are farmers, or others who regard the trade as a supplementary source of income, and not as their chief means of support. If the trade be sufficiently prosperous to survive repeated acts of misconduct on the part of the men, such losses as those sustained by the complainant in the case that came before the Athy magistrates must at least operate to keep down the wages."

A penalty of £10 and costs were assessed in the above case. The chairman said that the mischief in this case was not confined to one man's time or services. The refusal of the man to fulfil his agreement entailed upon his employer, it was stated, the loss of service of nine men for a whole week, during which time 40,000 bricks could have been made.

The foundation stone of a new parish church has been laid at Killesh, diocese of Ferns. The ceremony was performed by Lady Emily Chichester. The cost will be about £1,500. Mr. J. F. Fuller is the architect.



## LECTURES ON ARCHITECTURE.\*

(Continued from page 147.)

## DOMESTIC ARCHITECTURE, THIRTEENTH CENTURY.

WOODEN floors were occasionally found, though not often, on the ground story. The floor was more generally left with the earth pounded and rammed down, and covered with straw or rushes. Paving tiles of a plain character were used during the reign of Henry III., who was anxious to promote the progress of art, and encouraged foreigners to attend his court, and to introduce improvements from abroad, when practicable. The earthen floors, saturated with moisture, and receiving all the litter from the tables, must often have offended a fastidious taste, and royal orders exist, one of which directs that a room on the ground floor of Windsor Castle shall be "boarded like a ship," while another says that the "clerks of works" are to work day and night in order to wainscot another chamber "with boards radiated and coloured, so that nothing might be found reprehensible in that wainscot."

It was at this time that Italian priests were often to be found in England, in places of importance; and they must have brought with them the taste for coloured decoration, common in Italy. Polychromy, in consequence, became readily adopted in English work, and wainscots, walls, and ceilings were frequently painted, the subjects being chiefly allegorical, or taken from the sacred history, or the lives of the saints, and executed by the same artists whose works adorned the churches. Although the art may have been first introduced from abroad, there must have been plenty of skill among English decorators, or the fashion of polychromy could not have been so extensively followed as was the case. At St. Alban's, the Sacristan Walter, of Colchester, an Englishman, was an expert in such work, and is described in the chronicles of the period as "*pictor et sculptor incomparabilis*."

It was usual to paint the walls above the wainscoting, and it was not until a later time that the latter was carried up to the ceiling, as we see it in many Elizabethan houses. The wainscot being about 6 ft. in height, there was a good opportunity for the painter to decorate the wall above it, which was done sometimes by representations of curtains, and sometimes by more ambitious designs. Thus, we find King Henry ordering Walter de Burgh to build him a chapel at his manor of Cliff, and "cause the chamber of our queen there to be wainscoted, and painted with a history." Another royal mandate directs the sheriff of Wiltshire "to wainscot the king's lower chamber, and paint it of a green colour, and put a border to it, and to cause the heads of kings and queens to be painted on the borders." He was also to paint on the walls of the king's upper chamber with the story of St. Margaret Virgin, and the four Evangelists; and to paint the wainscot of the same chamber of a green colour, spotted with gold, and to paint on it heads of men and women." The order concludes by saying that all these paintings are to be done "with good and exquisite colours."

These extracts (for which I am again indebted to Mr. Parker) will suffice to show the extent of the taste for polychromatic decoration, which had now come into use, and had spread from the churches to the domestic architecture of the day. They also enable us to appreciate the interest taken by King Henry in the architectural improvements then in progress. His orders are most precise, and extend to the smallest details; thus he tells the constable of the Tower of London, in one instance, that he is to have the walls of the queen's chamber, which is within his own chamber, washed and painted with flowers; he is also to cause the drain of the king's private chamber to be made in the fashion of a hollow column, as

"our well-beloved servant, John of Ely, shall more fully tell thee."

The king is thus shown to us directing the building, decoration, and detailed arrangements of the royal palaces. He encouraged artists at his court, and carried out large works at Westminster, both in the abbey and the palace; he attended personally to the repairs and enlargements of the various Crown buildings throughout the country, and assisted in the improvement of the parish churches, these being undertaken by the clergy and the local authorities. We find his favourite style of decoration is that mentioned in one of the above quotations, viz., green, with gold stars, and this fashion has been ascribed to the taste of William the Florentine, an Italian artist, much employed by the king. This man was also an architect, and held the office of "master of the works," at the palace at Guildford.

The houses in towns were still low, seldom having more than two stories; but the king was anxious to increase their height and importance. He was struck with the effect of the architecture of Paris, in this respect; for, after he had paid a visit to that city in 1254, we find it recorded that, "when the King of England had passed through the street which is named La Grève, and afterwards the street towards St. Germain Antin, and then the great bridge, he observed the beauty of the houses, which are built of gypsum, or plaster, in the city of Paris, and houses containing three chambers, and some even of four stories or more, from the windows of which stretched forth a countless multitude of people of both sexes."

As regards this comparison with Paris, it may, however, be remarked that, in many important particulars affecting the health and comfort of the people, London, in the thirteenth century, had some points of superiority over its rival, which remain, more or less, to the present day. Thus the streets were wider, the pavement better, drainage less imperfect, and the lowness of the houses more conducive to the general health, by allowing a free passage of light and air. As regards this last matter, I cannot but regard with anxiety the present tendency to increase the height of our buildings indefinitely, each wishing to take his own course, regardless of general architectural effect, and of these important sanitary questions of which I have spoken.

In England the attention given to these matters by King Henry illustrates the advancing civilisation of his time, and we find water was laid on at the Palace of Westminster by his order. A special favour was in this instance granted by the king to the architect, Edward Fitz Otho, for to him permission was given to have a pipe, the size of a quill, to convey the water from the conduit to his own dwelling-rooms. Towards the close of the century baths were introduced in some of the chief palaces, and conduits of pure water conveyed a benefit to the citizens which they do not unfortunately always enjoy in our own day.

The drainage of houses was, for a long time, of the simplest description; the water dropped from the eaves of the roof, and open channels carried off, more or less imperfectly, refuse of every description. Underground drainage was known to the Romans, as the splendid remains of the "*eloaca maxima*" at Rome abundantly testify; but in England it does not seem to have been practised before the thirteenth century. As hamlets grew into villages, villages into towns, and towns into cities, the inconvenience of primitive arrangements became manifest, and a more complete system of gutters, pipes, and drains came into prominence.

In the Royal Palace of Westminster, we find there was an open channel for drainage, down the middle of the hall itself. This becoming intolerable, and affecting the health of the courtiers, the king ordered its immediate removal, with other sanitary changes, and, to press the matter, named an early day for the completion of the works, declaring that they must be done, "even though it

should be necessary to hire a thousand workmen a day" for them. An underground drain was provided, in consequence of the king's order, so as to communicate with the Thames, and in the order for payment we find £126 17s. 8½d. were expended on the work, which included the repair of the kitchen chimney. The new drain is termed a "conduit," and it is stated that the king ordered it to be made "on account of the stink of the dirty water which was carried through his halls, which was wont to affect the health of the people frequenting the same halls."

I have brought this particular instance before you, because it seems to show two things: first, the condition of such matters at the time; and, secondly, the reforming spirit which was arising, and which was fostered by the royal example. When kings' palaces had open drains in their very halls, you may easily picture to yourselves the condition of humbler dwellings; and, on the other hand, in the complaints which now began to be heard of these primitive contrivances, we discern the advent of that spirit of healthy grumbling, which heralds the approach of improvement. In the orders of Henry, and also of Edward I., there are frequent references to such matters, all of which prove that the attention of the most enlightened part of the community was becoming convinced that the time was come for an advance on the customs of their predecessors.

Let us now see what changes have been silently growing in the forms of architecture since the days of the Normans. The style of the thirteenth century is perhaps best known to most of you by the term Early English, as used by Rickman. Other names have been given to it, as, for instance, First Pointed, and the style has again been subdivided into epochs; but it is not necessary for my present purpose to trouble you with their refinements, and it will suffice for us now to regard the style which we are considering under its old-fashioned title.

You will remember that we found the characteristics of Norman work to be solidity and simplicity, not without considerable richness of surface details. We now find greater lightness, both of effect and of materials used, more deeply cut mouldings, and more elaborate construction. The semicircular arch had given way to the pointed form. Both kinds were used in the same building, until ultimately the latter secured an exclusive predominance. The gain in freedom of construction from the introduction of this feature soon showed itself in the greater extent and beauty of the groins and vaultings. The favourite shape of windows in domestic work remained, as hitherto, the two-light-type, and the opening was frequently divided by a column as in Norman examples. This use of the column is of great antiquity, and is found in Byzantine works; it was commonly used by the architects of the thirteenth century, not only for the openings of windows, but also in the case of doorways, which were frequently divided by a single column, or by a cluster of shafts, as at Southwell Minster, and elsewhere. In the case of doorways used by large crowds, this arrangement of a central pier would not be without its convenience, if advantage were taken of it, to divide ingress from egress.

It was in the column, however, that the greatest change had taken place. Shafts of moderate size, clustered, and sometimes banded together, now supplied the place of the sturdy Norman pillars, and the traces of classical traditions disappeared from the capitals. Volutes and the square abacus were dispensed with, and a conventional foliage of singular beauty replaced the leaves which evidently recalled memories of the acanthus. The bases, on the other hand, while becoming more elaborate, are not without a resemblance to the Attic base of the Corinthian order. Both bases and capitals were deeply cut with hollows, and these were divided from the round mouldings by small fillets. The same characteristics marked the

\* By Professor Barry. Third lecture. Delivered at the Royal Academy on Monday, March 12th.



arches of the period, and powerful effects of light and shade were freely used.

The most widely-known detail of this period is that known as the dog-tooth ornament. It is one of great beauty, and is so well known that I need not describe it. We have already noticed the frequent use of zig-zags by the Normans, and there can be little doubt that on them was founded the design of the dog-tooth. It is, in fact, only a double zig-zag, carved into leaves. It is found in every detail of the time,—in arches, capitals, string-courses, corbels, and the like; and in examining ancient buildings it is a good rough-and-ready test of the period of which we are now treating. In the greater churches more ambitious sculpture now came into use, of which the cathedrals of Lincoln and Wells are splendid examples, and in all the work of the thirteenth century there is evidence of beauty of design and skill of execution, which was not of long duration, and has marked out the period as the golden age of English Gothic architecture.

The windows were often combined in groups of two, three, or five lights. The arrangement of three as a triplet, with a longer light in the middle, is the ordinary form, of which we have good examples in London, at the Temple Church. Other fine groups, as that known as the five sisters at York, may also be noticed. Window tracery did not come into general use till a later period, although, as we see from the Southwell example, it must have been well known. The windows were for the most part long openings, without mullions, and terminated in a single pointed arch, sometimes cuspoid, which has given rise to the name of Lancet. The above are, I think, the principal points to which I need draw your attention before we consider the architectural differences between the domestic buildings of the thirteenth century and those of the Normans, discussed in my last lecture. The changes I have noticed are, of course, only the most obvious and salient points of difference, and you will readily notice in your study of examples, the many smaller matters of detail which accompanied the more important variations. The style was complete before the century had far advanced, and its later specimens indicate that a transition had already begun, and that new changes were imminent.

Among the examples of domestic architecture before alluded to, Aydon Castle, in Northumberland, is worth attention. It was not originally termed a castle, according to the semi-royal custom of the day; but it was intended primarily for a residence, and was called "Aydon Halle," thus following the usage which usually prevailed as regarded the manor-houses and residences of the gentry. At the same time, as the building is near to the Scottish frontier, and is situated in the debatable and unsettled Border land, we may naturally expect to find that capability of defence was not overlooked. It is placed, therefore, on an eminence, with no windows within easy reach, and with those which were necessary few and far between. Battlemented parapets surround the roofs and provided shelter for the archers in case of need. The house stands in a considerable enclosure, which would serve as a defence to servants and cattle in case of a siege or sudden attack. The nature of the ground protected the enclosure on two sides, and on the others there were ditches at the foot of the enclosing walls.

There is nothing architecturally grand in this example, but it may interest us as a specimen of a fortified house of the Border country. It possesses great strength of construction, and the mangers in the stables, even, are of stone. It is noticeable that fireplaces are here freely used, and no doubt for this circumstance the climate, and the facilities for procuring fuel, may be answerable. These fireplaces are of simple, but good design, and in one instance there is a projecting shelf supported on brackets. In this case the fireplace and hearth are built in the thickness of the wall. In another instance,

shafted jambs are built against the wall, and project into the room, while over all there is a covering hood, tapering upwards. The chimneys themselves are for the most part carried up singly, in plain solid-looking shafts.

The water is conveyed from the roof by stone gutters, behind the parapets, and there are stone projecting shoots, or gurgoyles, to take the water from the gutters outwards. The principal rooms for the family are on the first floor, and they are approached in the manner usual in castles, by a long flight of external steps, originally covered by a wooden roof, which has now disappeared. The windows to the chief rooms are of the ordinary two-light type, with a dividing column. Each light has a plain pointed arch, and the two openings are surmounted by a pointed arched dripstone, or label moulding. Holes in the masonry around the windows suggest the existence of iron bars, now removed. The window column, though more sturdy in its details than is usual in Early English work, is yet quite distinct in its character as compared with the Norman feature of the like kind, which we saw in the case of the Jew's House at Lincoln. You may compare with interest the greater decoration of the latter town residence with the simple but handsome strength of the castellated country mansion of Aydon.

Before quitting the latter, a word may be said about the doorways. The principal entrance at the top of the flight of steps before mentioned is finished with a pointed arch of simple character, with double-splayed jambs. As this entered into a story of considerable altitude, no question would arise as to the height of the arch, but it was otherwise in cases of more moderate dimensions. It is curious to notice how early our ancestors discovered this difficulty in the employment of the pointed arch, and you will observe in one of the doorways the use of a square lintel, with the upper part of the jamb curving inwards; a design which was capable of much greater development. The same square form was also used for window openings when required, and there is an example of this feature in the same building. The thirteenth-century architects knew that good architecture should be governed by common sense, and while clinging to the pointed arch with the utmost affection, they thus early recognised that there were limits to its reasonable application, and that there is a time and place for everything.

It must, of course, be remembered, in considering the examples of thirteenth-century domestic architecture, that from the nature of the case we are only dealing with houses of importance. The dwellings of the people at large, having been chiefly of wood, have naturally disappeared. If the arrangements of the houses of the rich are to our minds far from luxurious, we may be sure that the poor had little comfort in their ruder dwellings.

We shall find that in the South of England, as well as the North, the houses of the gentry still partook of the nature of castles. Little Wenham Hall, in Suffolk, is a good example of this habit, and it is notable because the materials used are different from those employed at Aydon. Here we find brick walls, built of long narrow tile-bricks, of the Roman fashion. The bricks are mixed with stone for windows and dressings. In this part of the country, there was not the same necessity to provide for the possibility of a siege that existed in the Border land of the North. There was, therefore, no great extent of enclosure walls, and the plan was in consequence more compact, although with strength enough to resist any isolated attack, whether by pirates, or migratory bands of robbers.

Most manor-houses of the time were built with regard to such possibilities. At Little Wenham Hall, the sterner features of Aydon are softened, and a greater amount of decoration is introduced. Some of the lancet windows have trefoiled heads, and tracery is found in the two-light windows. A turret, at the angle of the tower, contains a newel

staircase, and there is a chapel in the tower with some good architectural details and carving.

Taken altogether, we find in this southern example a certain progress towards refinement, due probably to the more settled state of the country, and to the somewhat more genial climate. At the same time, the character of a fortified house is well maintained. A more domestic-looking relic of the time is to be found in the old Rectory House, at West Dean, in Sussex. As this is situated close to the church, it was, no doubt, erected for the use of the clergy, and hence it dispensed with those precautionary measures which were still thought necessary in the manor-houses of the laity. It is a plain and simple building, with a high-pitched roof, but with little or no architectural ornament. The massive square chimney is in the gable, and the roof is covered with slabs of stone, with dripping eaves. There is a good two-light window in the upper story, with a columnar mullion. Each light has a trefoil head, worked above the opening for the casement. The latter is finished square, with a stone lintel.

Although there is not much to interest us in this building, taken by itself, it may serve to show to a greater degree than the other examples what less pretending dwellings of the thirteenth century were like. Even this house, it may be remarked, was of stone, but the features of its design are simple, and just such as might be expected to occur in the more common wooden structures of the period. In it we seem to have a residence of one who from his poverty feared no robber, and whom his sacred character protected from violence. He was, therefore, enabled to live in a house which was not a fortress, but which might pass for a cottage in our own day.

In parts of the country where water was easily obtainable, we often find a moat surrounding the house, with a drawbridge to the principal entrance. The moat supplied the place of a protecting wall, and although it could scarcely have been of great use in the event of serious attack, it would probably suffice to keep off any wandering bands intent on plunder or ransom.

It need scarcely be pointed out that all houses of importance in the thirteenth century possessed their domestic chapel. The orders of Henry III. are full of minute directions about the "Queen's Chapel," in the various royal residences, detailing what is to be done for their maintenance and decoration, and in some instances ordering the sheriff to supply a chalice, vestments, books, and other necessary ornaments. The custom of the place was the same as that of the manor-house, in this as in other matters, and thus the chapel came to be considered as an almost necessary appendage to private houses of importance throughout the country.

There was not much furniture in the houses of our ancestors, at least in our acceptance of the term. That which was required was, for the most part, made on the spot by the carpenters and workmen of the estate. The windows had stone benches, and there was a dais for the king, or lord; of movable furniture there was little or none; massive fixed tables were common in the hall, and sometimes trestles were used, on which moveable tops were placed for meals. The tops often consisted of boards, roughly fitted to each other, and under these circumstances the phrase to "board," acquires a special significance. Forms and benches furnished the seats, and possibly served also as couches, the hall being still often used as a dormitory as well as a dining-room.

The king's seat, in important palaces, had usually some importance of design, being of stone or wood, with a canopy, and decorated with carving, painting, and gilding. Moveable chairs were in occasional and rare use. Curtains may have covered the doors, and also ornamented the royal canopies, but they were not common until a later period. This was doubtless by reason of their cost, for





PHOTOGRAPH BY THE LITHO PRINTING CO. WILLIAM ST. DUBLIN.

NEW CHANCEL ST. BRENDAN'S CHURCH BIRR.-Thos Drew R.H.A. Arch<sup>t</sup>.



The  
of  
Society of Friends



they were evidently well known to the artists who carried out coloured decoration, and of whose favourite subjects was a painted curtain, with stiff folds.

With regard to beds, there is not much information. Bed-chambers existed, but the provision of them was scanty, even in great houses. Mattresses were, however, in ordinary use, and those of the king were covered with silk, velvet, and embroidery. The people generally appeared to have laid out their mattresses where convenient, instead of placing them in bedsteads, in the modern fashion. The love of linen which has distinguished careful English housewives, to the present time, became early apparent, and the large presses and cupboards were well filled. To "take up" one's "bed and walk" was, as we know, the custom of the East in Gospel times, and it is so still in Eastern countries, and to some extent in Russia.

The great houses were lighted with candles, and silver candlesticks appear in the inventories of royal goods and chattels. They were, as we know, one of the indispensable ornaments of the altar. Wooden bowls and trenchers sufficed for general use at table, and the meat was often brought to the hall, on the spit, fresh from the kitchen fire. Each guest carried his knife, and helped himself, as the spit was brought within reach. Forks, although known, were looked upon as luxuries or curiosities, and the meat was cut up by each person on his trencher-board, and eaten with bread. Spoons were used occasionally by the wealthy, and possibly forks also, but the latter were the less common of the two. There were often mats for the feet, when the floor was of earth or tiles.

These details in the mode of life in the thirteenth century relate to the habits of the rich, for even kings in those days were without comforts, which we now think indispensable for all classes. The mass of people had to be contented with simpler arrangements and rougher living.

This, however, was the time when our English Gothic architecture achieved its greatest perfection. Artistic feeling applied itself in after-times more vigorously to the private wants of men; but these were the days of palaces, abbeys, and churches,—of the glories of York, Lincoln, and Salisbury. If the days of such architectural triumphs seem to some of us to be gone for ever, we may, perhaps, feel some consolation in the thought that each age has its own special work. The world, as it grows older, takes more and more into account the necessities of its humblest members, and so, in our work of to-day, we may find much to interest and instruct us, though little to be absolutely copied, in the domestic architecture, habits, and ways of the thirteenth century.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

SOME further notice of the life and career of James Quin than what has cropped up incidentally in the earlier portion of our notes, becomes necessary. Like Charles Macklin, he belonged to two centuries, having been born in 1693, and living on till 1766. Though London is generally acknowledged as the birth-place of Quin, he was undoubtedly of Irish descent, and came of a race who can trace their pedigree back for several centuries. The late George Petric, the antiquary, in an article in the sixteenth number of the *Irish Penny Journal*, 1840-41, writes—"The O'Quins, chiefs of the Clan Hy-Iferman, a family of equal antiquity with the O'Briens, and of the same stock, namely, the Dal Cas, or descendants of Cornac Cas, the son of Ollioll Oluin, who was monarch of Ireland in the beginning of the third century." The Hiffermans, O'Quins, and O'Briens, at one time held large possessions in the county Clare, Limerick, and other southern counties. One of the O'Quins, of Inchiquin, forms the subject of a well-written and racy

piece of ballad history in the ninth and tenth numbers of the second volume of the *Dublin Journal of Temperance, Science, and Literature*, 1842-3, under the heading of "Scraps from Irish History." *En passant* we may observe that the writer of the "Scraps" contributed other racy and admirable pieces of ballad history to both volumes of the above mentioned journal; and, if we are not mistaken, the writer in question was the author of the well-known poem of "The Monks of Kilerea."

But to proceed—James Quin, although taking to the stage, and becoming subsequently a distinguished representative actor, was originally intended for the law. When very young he joined a company of players performing in Dublin and other places, before he appeared at Covent Garden Theatre, London. We find Quin acting in Smock-alley in or about 1715, under the management of Ashbury, as Cleon, in the play of "Timon of Athens, or the Man Hater;" and again, he made his first appearance in the character of Abel, in "The Committee, or the Faithful Irishman." We have already alluded to Quin's subsequent appearance on the Dublin stage in 1741-2, Quin and Cibber's performances being the great attraction in Aungier-street on the eve of the great *Garrick fever*. Quin was another remarkable instance of an actor whose earliest successes were obtained upon the Dublin stage, and who kept on improving until the London managers considered his services indispensable.

We repeat here again that the Dublin stage in the eighteenth century proved an admirable training school, and many who made their first appearance on the boards of Dublin theatres under Ashbury, Elrington, and Sheridan, afterwards became eminent in their respective walks. After his engagement at Covent Garden Theatre, Quin played Falstaff with the greatest success, and he became the first actor of his time until Garrick appeared. In 1746 both Quin and Garrick appeared in the "Fair Penitent;" and both exhibited a remarkable display of power, for indeed then, and for some time after, they were looked upon as rivals. If Macklin had the misfortune to kill one brother actor by accident, Quin had the misfortune of killing two in self defence. In 1717 Quin killed Bowen, and the affair is thus described by Dr. Doran—"The former declared that Ben Johnson acted *Jacomo* in the 'Libertine' better than Bowen. The latter pursued Quin to a tavern, shut the door of the room in which he found him, placed his back against the door, and threatened to pin Quin to the wainscot if he did not immediately draw. Quin remonstrated, but drew, and kept on the defensive, whilst the impetuous Bowen pressed so upon his adversary, that he actually fell upon that adversary's sword, and died, after acknowledging his rashness. Quin was tried, and acquitted."

Several writers upon the Stage and dramatic matters have left us their estimates of the abilities of Quin, and among them brother actors; and poetry or rhyme has been utilised to describe his genius and action as well. Richard Cumberland gives us this picture of one of Quin's appearances, which he witnessed: "Quin presented himself, upon the rising of the curtain, in a green velvet coat, embroidered down the seams, and enormous full-bottomed periwig, rolled stockings, and high-heeled, square-toed shoes. With very little variation of cadence, and in a deep full tone, accompanied by a sawing kind of action, which had more of the senate than of the stage in it, he rolled out his heroics with an air of dignified indifference that seemed to disdain the plaudits that were bestowed upon him."

C. R. Leslie observes: "Quin's Falstaff must have been glorious, and the tradition of it places Quin very high, for it seems to be the most difficult of all characters to sustain. Since Garrick there have been more than one Richard, Hamlet, Romeo, Macbeth, and Lear, but since Quin only one Falstaff

(Henderson). Quin seemed born to play it. He was convivial; and when carrying the dead Hotspur (Garrick) off the stage, he would say to him, 'Where shall we sup?' He was satiric, and had much of Falstaff's wit; but in him it was the appendage of a noble nature."

The following account is given in "Dramatic Anecdotes" of the unlucky accident that cost a little Welsh actor of the name of Williams, his life, in 1718, when he was playing Decius to Quin's Cato, in Lincoln's-Inn-Fields Theatre:—"He entered with—'Cæsar sends health to Cato;' but he pronounced the last name affectedly, mincing it into something like 'Keeto.' Quin, who gave a broad classical enunciation to the letter 'a' in the word, was offended, and instead of replying—

'Could he send it  
To Cato's slaughtered friends it would be welcome,'

he exclaimed—"Would he had sent a better messenger." The fiery little Welshman was bursting with rage, and when Cato resumed with—"Are not your orders to address the senate," he could hardly reply—"My business is with"—it would not come—"Keeto." Ten times in the short scene he had to repeat the name, and Quin nearly as often; but the latter gave it a broad sound, and delivered it with a significant look which almost shook the little actor off his feet, and did shake all sides of the house with inextinguishable laughter. When they met in the green-room, the Welshman, triply armed by having a good ground of complaint, assailed Quin for rendering him ridiculous in the eyes of the audience. Quin said it was in their ears, and would have laughed the matter off. But the soul of Williams would not stoop to such treatment, and after the play he lay in wait for Quin under the piazza as Cato passed that way to take his punch. The elder actor laughed as Williams drew his sword, and bade Quin defend himself. The latter would have sustained defence with his cane, but the angry Welshman thrust so fiercely that the other was fain draw his rapier, which speedily, but without malice, passed clean through the poor player's body. Decius was stretched dead on the pavement, and Cato looked on bewildered. Here was a man slain, and all for the mispronunciation of a vowel! The tragedy brought Quin to the bar of the Old Bailey; but the catastrophe was laid rather to the fashion of wearing swords than to the drawing them with evil purpose; and Quin was freed from censure, but not from sad memories."

Quin appears to have been in size and appearance like a second Daniel Lambert, or Tichborne Claimant; but his aldermanic proportions fitted him admirably for our idea of the character of Falstaff. The "Dramatic Censor" alludes to his corpulency and dress in the following words:—"It will, perhaps, be scarcely credited, yet it is solemnly true, that we have seen Mr. Quin, when at least sixty years old, and of such corpulency as to weigh twenty stone, roll on for the Young Chamont in 'The Orphan,' in a suit of clothes heavy enough for Othello; a pair of stiff-topped white gloves, then only worn by attendants on a funeral; an old-fashioned major wig, and black stockings; yet odd as this external appearance may seem, his performance was not one jot less so; and without exaggeration we may assert, that there never was anything so like a burlesque as the veteran's dronish apology for the juvenile soldier."

Actors of acknowledged reputation often took liberties with their audience, and we suppose it was the same with Quin and others of his brethren. He was for long years a public favourite, and continued so, although his sun paled, before fresher aspirants and rivals, who snatched from him the palm which he previously held. He might fall back perforce; but he never fell back into obscurity in his old age, and in the light of his past achievements, his carelessness or eccentricities, or oddities, or whatever else they might have been, were gracefully forgiven him.

\* See ante.



Davies thus discourses upon the excellencies of Quin as an actor—"To Mr. Quin's various excellencies in acting, I have endeavoured to do equal justice, and in general we have authority say, that to his various parts in comedy may be added no mean list of dignified characters in tragedy, where sentiment and gravity of action, and not passion predominated. He had so happy an ear for music, and was so famous for singing with ease a common ballad or catch, that Gay was persuaded to offer him the part of Macheath in the "Beggars' Opera;" but after a short trial of his abilities Quin gave it up. . . . Mr. Booth gave ample testimony to his elocution; for having seen him act the part of the Duke in 'Measure for Measure,' he declined reviving the play and acting that character, though pressed to it by Wilks and Cibber. Booth declared he would never, if he could help it, hazard a comparison between himself and Quin."

Churchill, though often unjust, is just in the following lines on Quin—

"In fancied scenes, as in life's real plan,  
He could not for a moment sink the man.  
In whatever cast his character was laid,  
Self still, like oil, upon the surface played.  
Nature, in spite of all his skill, crept in;  
Horatio, Dorax, Falstaff—still 'twas Quin."

Percy Fitzgerald, in his "Life of Garrick," estimating Quin at the distance of over a hundred years—for Mr. Fitzgerald is a living writer—draws this picture of the actor and his compeers:—"Quin's position, long the established tragedian, and in command of the town, was cruelly affected by Garrick's success. He was at once thrust down and deposed. There was fatal truth in the hypothesis he threw out in his first burst of disgust—'If this young fellow be right, then we have been in the wrong.' He secretly believed they were right, and therefore the 'young fellow' was wrong. But alas! the public were deciding the question rapidly, and without any question of delicacy. Such dethronements have always been carried out with the rudeness of a *coup d'état*. So sudden and mortifying a desertion is always terribly incident to the actor's lot; this was the third time he had experienced this rude shock. On Booth's death he had reigned supreme; when suddenly rose Delane, and Quin found himself deserted. Again, Macklin's success had brought a fresh abandonment. Yet there was a bluff honesty about Quin—even to dignity—in the way in which he set himself to do battle for his throne; when he found himself fairly beaten, he gave up the struggle, and for a time retired. He had no animosity to his conqueror, and could later become his warm friend."

Quin performed many charitable acts during his life, and in a graceful manner. Thomson, the author of "The Seasons," received £100 from Quin as a tribute to the genius of the poor poet, the reading of whose works afforded the donor extreme pleasure. He procured for Winston, when in a most destitute condition, an engagement and an outfit, and when the latter timidly asked his friend what he should do for a little ready money for the next few days, see how humorously Quin played upon the feelings of the famished actor he was all the time further befriending. "Nay," exclaimed Quin, "if you're in want of money, you must put your hand in your own pocket;" and when Winston did so after Quin's departure, he found a £10 note, which Quin had dropped there.

We might go on to a great length in quoting favourable opinions of Quin as an actor, a gentleman, and a true friend, from the pages of those who knew him, or have written of the stage and the actors of his day. There are many anecdotes still current of Quin's wit, which illustrates his character; but we cannot make much use of them here. Quin was employed at one time by Frederick, Prince of Wales, to instruct the Royal children in elocution, and when afterwards informed of the graceful manner in which George III. delivered his first speech from the throne, he is reported to have said—"Aye, it was I who taught the boy to speak."

At this time, or shortly afterwards, he obtained a pension, having retired from the stage some years previous. Thomson, in his "Castle of Indolence," pays tribute to the abilities of Quin; and David Garrick, his great and generous rival, thus writes his epitaph:—

"That tongue which set the table in a roar,  
And charmed the public ear, is heard no more.  
Closed are those eyes, the harbingers of wit,  
Which spake before the tongue what Shakespeare writ.  
Cold is that hand which, living, was stretched forth  
At Friendship's call to succour modest worth.  
Here lies James Quin."

We may fitly conclude here our notice of James Quin. Detailed particulars of his life and theatrical career will be found in other volumes, and among the number Dr. Doran's "Her Majesty's Servants," in which a very full and appreciative sketch of James Quin will be found. Although claimed as an eminent English actor, and acting for the greater part of his life upon the English stage, we have put in our claims for consideration on the score of his Irish descent, and his early appearance upon, and connection with, the Irish Stage.

#### WATER-PRESSURE MACHINERY.

At the meetings of the Institution of Civil Engineers, London, held on the 8th and 15th ult., a paper by Sir G. W. Armstrong, C.B., F.R.S., on "The History of the Modern Development of Water-Pressure Machinery" was read.

The author's attention was first called to the subject of water pressure as a motive power, by noticing the waste of power exhibited by mountain rills in the Craveu district of Yorkshire. He was thus led to devise a water-pressure engine, which combined the use of pistons with the continuous rotation of a water-wheel. A large working model of this wheel was tried in 1839, by connecting it with the street water pipes in Newcastle, when it gave a high co-efficient of effect. About the same time he pointed out that a stream of rapid descent might generally be conveyed in a nearly level cut along one of its banks, until it attained a great elevation above the valley, and until a point was reached where the fall could be rendered available by a pipe of moderate length. Also, that there were many precipitous streams which were capable of furnishing a surprising amount of power, especially if combined with flood-water reservoirs to equalise the supply. He likewise argued that the water supplied to towns for domestic purposes could, in many cases, be advantageously employed for working all kinds of machines. He showed that it would be more economical to use water for the crantage of a given weight of merchandise than hand labour, and that it would result in greater expedition. The principle, too, was enunciated that, when water was lifted by a pumping engine it became the recipient of the power exerted in raising it, and that if the same water were used as a motive power in descending to its original level, it would render back the power conferred upon it by the engine; so that the power of the pumping-engine might be transmitted to a distance and be distributed in large or small quantities as required. A crane was then designed, in which the lifting was performed by the single stroke of a piston, multiplied by folding the chain over sheaves in the inverted order of pulley-tackle, the slewing motion of the jib being effected by a separate cylinder, the piston of which was attached to a rack working into a circle of teeth at the base of the crane. By a suitable valve the water was admitted into the lifting cylinder, when the weight on the chain was to be raised, and suffered to escape when the weight was to be lowered. To avoid dangerous jerks by the sudden closing of the outlet when the weight was being rapidly lowered, a small clack valve was applied, opening upwards against the pressure in the supply-pipe, so as to permit the pent-up

water in the cylinder to be pressed back in the supply pipe whenever the compression in the cylinder exceeded the pressure of the water in the pipe. The slewing cylinder was also fitted with an appropriate valve for admitting the water to either side of the piston, while it allowed an escape from the opposite side. Relief valves were likewise applied at each end of the slewing cylinder, to save the machinery from being broken or strained by the momentum of the jib when the regulating valve was suddenly closed. In 1846, a crane on this principle was erected at Newcastle, and speedily attracted the attention of engineers. The late Mr. Jesse Hartley was induced to order cranes and hoists for a portion of the Albert Dock, Liverpool, to be worked by the pressure from the town water-pipes. These machines, when first erected, answered perfectly; but the pressure of water soon became so variable, that the extension of the system was considerably checked, until the alternative method of employing a steam-engine, to generate the pressure, was introduced. Hydraulic cranes for railway stations were first adopted in 1848 by Mr. Harrison, Past-President, Inst. C.E. Up to 1849, all the cranes and hoists which had been erected derived their power from town reservoirs; but about that time the author substituted an air vessel for an elevated tank. In 1849, the late Mr. Rendel consulted the author as to employing hydraulic pressure at the Grimsby Docks, not only for working cranes, but also for opening and closing the dock gates and sluices. To obtain the necessary pressure a tower 200 ft. in height was erected, to carry a reservoir into which water was pumped by a steam-engine. The machinery came into operation in 1851. In 1850, Mr. Fowler, Past-President Inst. C.E., decided to apply hydraulic pressure for the cranes in the goods sheds of the New Holland Ferry Station, and also for raising and lowering two platforms to communicate between the railway and a floating landing-stage on the river. As local conditions prevented the erection of a water-tower, the author was led to the idea of the present accumulator.

Until 1849, the author had met with no opportunity of realising his original idea of utilising mountain rills; but he was then consulted by Mr. Sopwith, M. Inst. C.E., as to substituting water-pressure engines for overshot water-wheels at Allensheads. The water was collected in reservoirs at elevations of 200 ft., and all the purposes to be served required rotative motion. Reciprocating engines were, for various reasons, adopted. Each engine had two cylinders placed at an angle of 90° to each other, and working upon the same crank pin. Balanced cylindrical valves were used, and the passages were large, to keep down the velocity of the water. Relief valves were applied to prevent shock at the end of the stroke. An extension of hydraulic machinery, involving the use of accumulators, was made later in the vicinity of Allenshead.

In 1851, the late Mr. Brunel proposed the application of hydraulic pressure to turntables, traversers and hauling capstans, and an extensive plant of such machinery was erected at the Paddington Station of the Great Western Railway. By the end of 1851, the principle of transmitting and distributing the power of a steam-engine through the medium of water stored in an accumulator had become thoroughly established. The original idea of utilising mountain torrents, which was the progenitor of the accumulator system, had only been partially realised; but although the cascades and rapids in many unfrequented districts were still generally neglected as sources of motive power, and might continue to be so while coal was plentiful and mountain valleys remained difficult of access, yet it could hardly be doubted that the descent of water from elevated land was destined, at some future day, to become an important source of motive power. The transmission of the power might be facilitated by employing the prime moving column to pump water into



accumulators, and by conveying the highly pressed waters in a comparatively small pipe to situations where its value would be appreciated. The engine required would be a mere intensifier of pressure, and would be of the simplest description, consisting mainly of a press ram and a pump ram, in direct connection with each other, and having their areas proportioned to the acting pressure on the one side and the resisting pressure on the other. Even falls of small height, sufficient only for water-wheels and turbines, could be employed for giving a high pressure to water for the purpose of transmission, and this had actually been done near Allenheads; and it had lately been proposed to utilise, in a similar manner, the first cataracts of the Nile.

The author then described the various forms of water-pressure machines which had come into use under the heads of hydraulic engines, hydraulic cranes, movable cranes, movable jiggers, hydraulic hoists, coal discharging apparatus, coal-loading machinery, hydraulic machines for docking ships, sluice machines, swing-bridge machinery, draw-bridge machinery, hydraulic applications to gunnery, and corn warehousing machinery. He explained the modifications and improvements which had been progressively made, and showed the state of development at which water-pressure machinery had arrived.

#### ST. BRENDAN'S CHURCH, BIRR.

THE Illustration in present number is of a chancel about to be added to the above church by the Right Hon. the Earl of Rosse, and other parishioners. The existing church is a spacious, and, although of "Carpenter's" Gothic style with a groined roof in lath and plaster, somewhat imposing building, with a massive tower of effective outline, but of indifferent detail. It was erected about 1817, and there is little doubt was the design of Francis Johnston, who for that period had notions of Gothic architecture, such as they were, in advance of his age.

The chancel designed by Mr. Thomas Drew, R.H.A., is intended to be groined in stone, in two or three bays. The church is also to be re-seated, under the direction of the same architect.

#### BOOKS RECEIVED.

*The General Sustentation Fund of the Church of Ireland and its Extension considered, in a letter to a Friend.* By the Rev Philip Dwyer, Vicar of Drumcliffe, and Canon of Dysert, Diocese of Killaloe. Dublin: Hodges, Foster, and Figgis. 1877.

THE above pamphlet is intended to draw attention to the importance of organization and effort in relation to the financial affairs of the Church, since the disestablishment. The General Synod having already devoted, and, as many would say, lost so much time over the subject of revision, ought certainly by this time apply itself to the consideration of the ways and means by which the Church is to be in future sustained. Among the objects which should attract particular attention, we may be allowed to mention the proper maintenance, restoration, and extension of the Church buildings, which duties, since the extinction of the Ecclesiastical Commission, have fallen into the hands of the several vestries, and would seem to need some general system of aid and supervision. The appointment of a general Church Building Board by the Synod, and of diocesan architects in each diocese, to whom all new projects should be submitted, to ensure the observance of sound conditions, would appear to be desiderata. Mr. Dwyer's pamphlet deals with a good many subjects of importance to the financial affairs of the Church, and will, we trust, awaken some

interest. The same author announces a "History of the Diocese of Killaloe, from the Reformation to the Close of the Seventeenth Century," to include sketches of the characteristic ecclesiastical structures, and of the topography of the parishes.

The January quarterly number of the *Journal of the Royal Historical and Archaeological Association of Ireland* is a very interesting one. The Rev. J. F. Shearman continues his "Loca Patriciana," which occupies some sixty pages. Amongst the many illustrations given is one of "The Battle of the Boyne," photo-lithographed from the original in the possession of the Rev. Dr. Adams of Santry. The following are his observations on the picture:—

"This picture represents William III. directing the passage of the dragoons across the Boyne, and supplies a fact omitted, as far as I know, by historians, that infantry crossed riding behind the cavalry. The Pocket Almanack (of which this view constitutes the frontispiece) is a beautiful specimen of copper engraving, measuring only 2½ inches by 2½ inches, containing 24 leaves, and is bound in scarlet leather, gilt. The title-page reads 'The Dub'in Almanack for ye year or our Lord MDCCLXXVII., being the First after Bessetile or Leap Year.' It was 'printed for and sold by J. Risk, G. Ewing, and W. Smith, in Dames Street, Dublin.' The book contained also a chronological Table of Memorable Things since the Creation, ending with the 'Union of Eng. and Scotland,' the dates calculated backwards from 1737; Calendar with Saints' days, remarkable events, and time of high water at Dublin Bar; Table of Sovereigns of England from William I. to George II., giving their time, date of birth, commencement of their reigns, length of reigns, period since they died, and place of burial; and List of Mayors and Sheriffs of Dublin City from 1709 to 1737; concluding with an Interest Table at 6 per cent.

"This curious little Almanack was found inside a black leather pocket-book, with my great grandfather's name and the date 1753 stamped in gilt letters inside it. The pocket-book contains pockets for twenty, ten, five, three, and one guinea notes, also for half-guinea notes."

*The Journal of Forestry and Estates Management* is the title of a new monthly, the first part of which has been issued by Messrs. Rider, Bartholomew-close, London. In introducing his bantling to the public, the editor expresses his "wonder" that "such an organ has not long ago been established in this country for the organisation and centralisation of forestal interests. It is true, we know (he continues), that the want of one has been felt keenly and widely, although various obstacles have hitherto prevented the establishment of it." Forestry must be enfranchised in "the Republic of Letters." We wish the journal success.

#### PUBLIC HEALTH IN IRELAND.

IN commenting upon the Government Bill now before Parliament to consolidate and amend the Acts relating to the public health in Ireland, the *Medical Examiner* thinks it has not been introduced a whit too soon. The evils alluded to by our contemporary have over and over been dwelt upon in these pages:—

"We have more than once called attention to the deplorable state of sanitation in that country, and our remarks are more than confirmed by the fact adduced by the Registrar-General for Ireland. In many parts of the country the simplest laws of health are completely ignored, and the people are living in miserable abodes, densely packed together, with damp earthen floors and moist walls, with pigs and hens as constant co-tenants, and manure heaps blocking up the entrance. It is not surprising that infectious diseases of the most malignant type break out in the wretched hovels, and refuse to be stamped out. The registrar of Hollymount, Ballinrobe, for instance, records that on visiting a house in which were three cases of malignant diphtheria, he found in one room of about 18 feet by 12 feet the owner and his wife, a sick child, three cows, two pigs, and a donkey. In these filthy hovels zymotic diseases do not come singly, but sometimes, as if to make nature's revenge more strikingly manifest, combine their terrible symptoms. Thus from Anacarriga, Scariff, it is reported that during a recent epidemic of fever, scarlatina and

typhoid appeared in the same individuals. And where a single epidemic appears it often assumes a degree of severity unknown in England. For instance, at Dungen, Limavady, all the eight children in one family died within seventeen days, and in two of the cases there were large patches of diphtheritic exudation covering the side and chest for four days before the throat symptoms developed. It is really distressing in the present age of sanitation to have to record these terrible facts, but they ought to be made widely known, so that there may be no miscarriage of the necessary legislation. Any attempt to work the present Sanitary Act is utterly futile so long as the people are allowed to live in the disgusting dens which now form their homes."

If the provisions of the Public Health Act as it stands were properly enforced, the evils justly complained of would be minimized. In the city of Dublin there is, as well as in the more remote provincial towns, a like neglect in several directions. Our corporations are eternally seeking for more powers, while neglecting to use those they possess. Improvement bills are promoted, while the Artisans and Labourers' Dwellings Act is allowed to remain almost a dead letter.

#### THE NEW BRIDGES.

THE Port and Docks Board have accepted the tender of Mr. W. J. Doherty, at £110,000, for the erection of a swing bridge at Beresford-place and the widening and improvement of Carlisle-bridge. It is matter of surprise that so few tenders (only six) were sent in, considering the numerous applications for specifications and forms of tender, chiefly from English firms. The works at both bridges will be commenced at once, and will be carried on simultaneously. The eastern extension of Carlisle-bridge will be completed and opened for traffic before the existing superstructure is interfered with. Mr. Doherty has, we learn, just completed a contract for the Belfast Harbour Commissioners. Besides the work being executed in his usual style, he has perfected it within six months of the time stipulated in contract.

#### NEW INDUSTRIAL SCHOOLS, CAPPOQUIN.

[COMMUNICATED.]

ON Tuesday the 8th ult., in the midst of the unrivalled scenery of the Blackwater, the above institution, under the management of the ladies of the Convent of Mercy, at Cappoquin, was inaugurated by a public demonstration in the form of a bazaar and musical entertainment. These schools closely adjoin the station-house of the Waterford, Dungarvan, and Lismore Railway, and are situate immediately behind the house and premises previously used as a temporary school and house for a small number of boys. The buildings are T-shaped on plan, and are two storeys high, the ground floor being devoted to schools and work-room, dining-hall, large and commodious bath-room and lavatories, kitchen, scullery, pantries, &c.; the first floor to dormitories, superintendent's room, clothes-room, &c. The elevation is plain and substantial, impressing the observer with the idea of its general fitness for the purposes for which it has been erected. Everything connected with the building, even its ornamentation, appears to subserve some useful purpose. The under sides of all the floors and the roof of the dormitories are formed of open timber work, varnished. The buildings are surrounded with large fruit and vegetable gardens, play and other grounds. The dormitory is a really fine room, some 70 ft. long by 26 ft. wide, well lighted and ventilated. This probably led to its being selected for the bazaar and concert, which took place in connection with the opening of the schools, and also as a means to supply some of the funds required in addition to the amount already invested. The plans were furnished by Mr. Matthias T. O'Keefe, M.I.C.E.I., of Cork, and the work was executed by Mr. John Sheehan, contractor, and superintended by Mr. Michael Morrissey, both of Cappoquin.



## MECHANICS' INSTITUTES.

At a meeting held in connection with the fourteenth anniversary of the Yorkshire Union of Mechanics' Institutes, on the 23rd ult., at Bradford, Lord Chief Justice Coleridge, the Right Hon. W. E. Forster, and Sir Charles Reed, the Chairman of the London School Board, made severally some pertinent remarks in connection with the Mechanics' Institutes, and the question of education.

Lord Chief Justice Coleridge remarked that men nowadays were ashamed to say that knowledge and cultivation were bad things for any one in any stage of life. Knowledge in its widest sense and cultivation in its deepest meaning were admitted to be the privilege of human beings, and whatever was good and true would eventually assert itself, in spite of all opposition. The absolute supremacy of reason was about the earliest lesson which knowledge and cultivation taught, and by it the highest institutions must stand or fall. He denied altogether that knowledge was dangerous for the working class, and it was his profound belief that working men in proportion as they gather knowledge, became not dangerous but safe—dangerous, perhaps, as they ought to be institutions which admitted of no defence. It was the duty of every one to do the best for himself, in both soul and body, during the few moments God permitted us to live, but it was little in this respect that a poor hard working man could do for himself. He rejoiced to see their prosperity was founded on a sound commercial basis. The report of the proceedings of the past year showed that they had been doing real, sincere work, and as long as they continued to do so they would prosper.

The Right Hon. W. E. Forster observed that some people seemed to imagine that institutes were not required now, but he considered the conclusion to be quite fallacious. Forty years ago Government gave little or no help to education, and very few of the inducements to study which were provided in the present day. He thought it was very easy to show that all these educational changes did not supply a certain want which these institutes did. Speaking of Lord Sandon's Act, he said he was, on the whole, glad that it had been passed, and it showed that compulsion had worked successfully. But after a certain age compulsion ceased, and he did not think it would be wise to apply it after the age of 13 or 14 had been reached. All that could be expected from Government afterwards was help, but simply help to those who helped themselves. That being the case, the question came, How could they best work this voluntary system? The mechanics' institutes and kindred institutions seemed to supply the want. If the young people stopped at elementary education they would suffer, and those intimately connected with them would suffer also. If education was required as much now as in the past, could it be supplied in an easier manner? He thought it could. They had no longer to take boys of 15 or 16 into their institutes and teach them rudiments of knowledge as they had done in the past. Let them consider the state of affairs forty years ago as compared with the present, and they would see that there was more money and more time for the carrying out of the purposes of mechanics' institutes. As their member he asked them were they quite sure that Bradford did its share of this work? In comparison with other towns he thought there was room for increased effort. He was accustomed, however, to unblushingly recommend Bradford. He thought the institute ought to have kept far more than pace with the population.

Sir Charles Reed said the great fault of education in the past was that children were not sufficiently taught to think. Trained teachers with the skill to teach were of the utmost advantage to the country, and the mechanics' institutes gave them an opportunity of becoming more efficient. It was for them to show the people that they were

looking out for talent, and were prepared to develop it.

Mr. Hodgson Pratt, Lord F. Cavendish, and Mr. F. S. Powell also addressed the meeting.

## ADVERSARIA HIBERNICA,

## LITERARY AND TECHNICAL.

THE Ossian of Macpherson has long been admitted as a literary forgery, but the materials worked up by the latter were in a great part genuine, though subjected to alteration or elaboration. Macpherson in his day, and for long after, has been the object of severe handling; but several of his critics have not a tithe of his genius. The translation of the poems attributed by Macpherson to Ossian possess great beauty, and prove that their translator had poetical faculties of a high order. The authenticity of these poems was disputed by Dr. Johnson and other writers in Johnson's time, but they were zealously maintained by Macpherson himself and Dr. Blair. We have had several literary forgers as well as Macpherson, and not a few of them possessed remarkable abilities—sufficient, indeed, if exerted lawfully, to hand down their names to posterity. Passing by names of ancient date and coming down to the sixteenth, seventeenth, and eighteenth centuries, several writers might be instanced in various fields of literature who, if they did not actually in every instance forge works which they attributed to others, very often committed the sin of plagiarism. To be a plagiarist in modern days seems to be a small fault with playwrights, novelists, and others, although it is a species of literary forgery or theft. The poet Chatterton was a remarkable genius, and had not poverty and temptation proved too strong for his boyish mind, he would never have forged, or rather committed, the literary deception of writing a number of poems which he attributed to one Thomas Rowley, a priest of Bristol, in the fifteenth century. The boy poet may well be forgiven now in the light of his dire misfortune and his sad end at the age of 18. A literary forger of a different stamp was Samuel William Henry Ireland. He was for a short time successful in forging or passing off for genuine spurious Shakespearean documents, and, emboldened, he actually concocted a play called "Vortigen," which he palmed off on the public as an original work of Shakespeare. The play was actually produced at Drury-lane Theatre, John Kemble acting as Vortigen. Edmund Malone, an Irish lawyer who devoted his life to literature, and whose name became celebrated for his commentaries and editions of Shakespeare's works, first exposed Ireland's forgeries, and was followed by other critics. Irish writers in general have been very severe upon Macpherson since his death in 1796, and his faults are spoken of as if they ought never be forgiven him. Macpherson, however, has found at last in the person of a true poet, and a man of rich and ripe scholarly culture in the various walks of Irish literature, a friend to say a good word in his favour. Dr. Samuel Ferguson, in one of his notes to his poem of "Congal," published in 1872, thus writes of the sadly battered name and genius of Macpherson:—"Macpherson has been grievously ill-used both by assailants and defenders; but worse by the latter, who (possibly including himself) lie under a grave suspicion of having fabricated Gaelic equivalents for some of his finest English ideas, rather than admit his English to have had no Gaelic original. He would not confess that his originals had been helped, expurgated of puerilities and vulgarities, marshalled into a coherent, though erroneous, sequence of events, and exalted throughout by the infusion of his own pervading grandeur of thought. To this extent, he loved Scotland better than truth: but the candid inquirer will add, better also than fame for himself. When I see the conventional contempt in which this great poet is now held, especially by Irish writers whose own Ossianic fragments have been vulgarised by transmission

through channels far more corrupting than the pure and high-toned Highland tradition that gave his material to Macpherson—see the Dean of Lismore's charming book, *passim*—I am tempted to exclaim, in the words of D'Arcy M'Gee—

'O, clear-eyed Poets, ye who can descry,  
Through vulgar heaps of dead, where heroes lie;  
Ye, to whose glance the primal mist is clear,  
Behold there lies a slaughtered Noble here.'

The above is, indeed, a most kindly tribute to the memory and genius of James Macpherson; but the conventional contempt spoken of is still likely to be indulged in by hosts of flippant scribes who have a talent to criticise, but who are utterly destitute of a genius to create. Macpherson, however, committed a crime, and he has had to pay the penalty. Hundreds more have committed greater crimes, but they had not the ill-luck to be "found out"—at least in their life time.

In one of the chapters of Mr. Britton's admirable "Treatise on Dry Rot in Timber," recently published, there are some useful as well as interesting remarks on wood carvings. From it we learn some information about Grinling Gibbons' celebrated carvings, and the mansions throughout England where some of these fine specimens exist. There are house carvers and wood carvers; the former using flat and square surfaces, and the latter the rake or faye, as was the old term. It appears that about the period of Louis XIV., Malines was celebrated for its wood carvers, where the inhabitants might be seen sitting at their doors in the streets working at their craft, as may be witnessed by artificers of the present day in several German and Swiss towns. Numerous works of art and decorations of Flemish origin are still preserved in England, according to a paper read by M. de Leprieux, of the Belgian Legation, at a meeting of the Society of Antiquaries. The works of Flemish carvers have always been held in high esteem; and many fine examples are to be found in the churches of Norfolk, and other parts of England, which it is thought may be regarded as their productions. Grinling Gibbons, who, according to Evelyn, came from the Low Countries, created a school of carvers in England, and adopted a style and manner in building up his fruit and flowers to produce a grand effect. He chose but few varieties of these out of his own garden, and according to our authority, it is wonderful how he varied and played with these few. He originated a peculiar description of light interlacing scroll work, to be found in his best works, and since his death no one has successfully imitated him. At Bolton there are several examples; and in the chapels and state room at Chastworth, the fine trophies at Kirthlington Park, and the upper part of the reredos at St. James's, Piccadilly. The latter is accounted a "marvellous specimen." Mr. Britton, in quoting, adds a note here to say, that the large pulpit is not from the design of Sir Christopher Wren, nor is the carving by Grinling Gibbons.

At St. Paul's Cathedral the horizontal bands are said to be the perfection of this character of foliated work. All or most of Gibbons' carvings have a loose freedom about them. At Chastworth he instructed his workmen, who partook of his inspiration. At Lyme Hall, near Disley, there is a large amount of his work scattered over the rooms, great hall, and staircase; this building was erected by Sir Christopher Wren, under whom Gibbons worked at several other of his mansions and churches, including St. Paul's Cathedral. The work at Chastworth took nine years to complete, and was executed by several persons. At Blenheim, it is stated, there are several fine specimens of Chippendale's work; but what it all means or represents seems to be a mystery. Here there is a mixture or combination of "scraggy birds and flowers, cut into shreds, pagodas, and rustic waterfalls;" a lot of fine workmanship, producing nothing but an incongruous whole of absurd objects. In all these works there is a leading line



indicating what the old carvers used to call C and G style. There is also the S and G style. Abolish painting, and we are told,—and with some truth—we would have some fine house carvers again.

In Ireland we have some few specimens of wood carving in Irish oak and other woods; and here in Dublin we believe there is also a few good specimens of Irish oak carving in some of our old public institutions; for instance, in the Royal Hospital, at Kilmaham. The carvings in one or more of these places have been ascribed to Grinling Gibbons, the design of the Royal Hospital being credited to Sir Christopher Wren. Could not some of our architects, young or old, who occasionally read papers before our Irish architectural bodies, usefully employ their spare time in preparing a paper illustrative of carvings and carvers in Ireland during the last two centuries, and the buildings in which some of these carvings may still be found?

Wood carvings, as well as other wood-work, have suffered much from dry rot, and wood-boring and destroying insects. In Mr. Britton's book several recipes are given for the prevention and cure of the evils. He also gives the conclusions at which a commission appointed by the Department of Science and Art arrived as to the prevention of decay, or attack by these insects. We may fitly conclude this note by giving Dean Swift's poetical recipe for getting rid of the Anobium, or Death Watch, an industrious little insect which we have in our youth listened to for hours, while the old crones of the village shook their heads solemnly, as much as to say that somebody in the house was booked for a journey to another world:—

"But a kettle of scalding hot water injected,  
Infallibly cures the timber infected.  
The omen is broken, the danger is over,  
The maggot will die, the sick will recover."

The *Anobium Tesselatum*, or death-watch, for centuries past in Ireland, and in the sister kingdom too, has caused an immense amount of consternation, quivering, and shaking; and the superstition and fear that surround it have not yet died out among our people.

Here are a few under-glances of the sixteenth and seventeenth centuries. In a curious old poem called the "Libel of English Police" we find Irish exports thus enumerated:—

"Hides and fish, salmon, hake, herring,  
Irish wool and linen cloth, falding  
And masteries good be her marchandise;  
Hertes, birds, and others of venerie,  
Skins of otter, squirrel and Irish hare,  
Of sheep, lambe and fore is her chaffere  
Felles of kids, and conies great plentie."

The gold and silver mines of this country are also alluded to by the writer, but the object seemed to be to impress upon the English nation the necessity of keeping all the trade and commerce in their own hands. The Irish in the sixteenth century sent raw and tanned hides, furs and woollens, to Antwerp, taking in exchange sugar, spices and mercery. The trade with France and Spain for wines was very considerable, and continued down till the close of the eighteenth century. Fish was the commodity exchanged for this luxury. In 1553, Phillip II. of Spain paid £1,000 yearly, which was a large sum at that period, to obtain liberty for his subjects to fish upon the north coast of Ireland. Stafford, in writing of the capture of Dunboy Castle, mentions that O'Sullivan made £500 a-year by the duties which were paid him by foreign fishermen, although these duties were very little. We have evidence in the pages of Staniburst, who describes a fair in Dublin and another in Waterford, where wares were "dog cheap." Some of these fairs continued for six days; to them came merchants from France, Flanders, and England. The customs, dress, and manners of the people in the seventeenth century in Ireland differed much from what even octogenarians in our midst remember, except as relating to remote districts. The customs and dress of the upper classes in Ireland were the same as

those of a like rank in England, and education among the same class was apparently as much advanced. Many of the children of the rich were educated abroad, and a travelling tour on the Continent was a finishing part of their education. H.

### AN ELECTRIC CANDLE.

THE value of electricity as a source of artificial light has always been recognised, and its utilization has frequently been attempted. The great obstacle, however, which has hitherto prevented the practical attainment of this object is the difficulty of subdividing an electric current and producing a number of lights from one main source. This sub-division of the current as it flows from the generator has several times been attempted, and in some cases, experimentally at least, it has been attended with success. The fine carbon points were, however, quickly consumed when burnt in contact with oxygen, and thin platinum wires melted as soon as they began to give a perfect light, and, so far as we are aware, no system of sub-division of electricity has come into practical operation. About the first who attempted to solve the problem was M. Lodyghin, of St. Petersburg, who, some few years since, used a vacuum, burning the carbon out of contact with the oxygen of the atmosphere. The details of his apparatus, however, were imperfectly worked out, and failure resulted. M. Kosloff then took up Mr. Lodyghin's idea, and in time succeeded in producing an efficient means of sub-dividing the electric light. By forming the holders for the carbon points of a special metal, and producing the light in a vacuum lamp, excellent results were produced. M. Kosloff's apparatus was exhibited in London in May, 1874, and some very successful trials were made with it, and reported upon by us at the time. It does not, however, appear that this invention went beyond the phase of experiment, at least in England, although it was an invention of great promise. Hence, whenever electricity has been utilized as in lighthouses and for signalling or other purposes, the constant shortening of the carbon points by combustion has to be compensated for and followed up by clockwork, so that the necessary distance between the points is preserved as nearly uniform as possible.

It has remained for another Russian man of science—M. Paul Jablochhoff, who was formerly in the Russian military service—to demonstrate in practice the feasibility of sub-dividing the electric current. He has worked out his results in the form of an electric candle, which governs the production of the electric light and supersedes the ordinary clockwork arrangement. By it he has, moreover, demonstrated the possibility of obtaining several lights from a single source of electricity. The first practical trial of this system was made a fortnight ago at the Magazines du Louvre, and the experiments were attended with perfect success. The Marengo Hall was the apartment lighted, and six electric candles were sufficient to shed around a very bright light, which was softened by being transmitted through opal glass globes. Some idea of the comparative value of gas and the electric light under notice may be formed when we state that the Marengo Hall is ordinarily illuminated by means of 100 argand gas burners of the largest size. The cause of the wide difference between this and other electric lights lies in the fact that electricity plays, so to speak, only a secondary part in producing the light. The light is principally the result of the combustion of the refracting material which occupies in the electric candle the same position as does wax or tallow in ordinary candles.

The electric candle, as originally designed by M. Jablochhoff, consisted of what may be termed a double wick and a surrounding material. The wick consisted of two carbon points, about 4 in. long, embedded parallel to each other in an insulating substance, by which also they were separated from each other. This material, which was consumed as well as the double wick, was composed of several ingredients, forming a combination known only to the inventor. Each of the carbon points terminated at the bottom in a small metal tube into which the conducting wires were led. With these candles a series of experiments was sometime since carried out by a War Office Committee of Royal Engineers at Chatham. It was then demonstrated as one result that the system gave 50 per cent. greater power of light than had ever before been obtained from any electric light. The next development of the electric candle by M. Jablochhoff was to denude it of its outer casing, leaving merely the double wick with a strip of the insulating compound between the carbon points, which terminated at the bottom in metallic tubes, as before. It was with the electric candle in this form that the hall at the Magazines du Louvre was illuminated, as previously

stated. In either case only one electrical machine is needed to produce a number of lights. The positive and negative wires are led from the machine, and branch wires are simply conducted from them at the necessary points to the candles. In this way M. Jablochhoff succeeded in getting as many as eight candles to burn at the same time in the circuit of a single machine of the ordinary kind, with alternating currents.

Arrangements are being made in England to light up one of the East and West India Dock Company's docks in London upon M. Jablochhoff's system, so that the loading and unloading of ships may be carried on by night as well as by day when desirable. Experiments were to have been primarily made in order to test the system, but since the exhibition of the electric candle at the Louvre M. Jablochhoff has still further improved his system, so that the experiments have been postponed for the completion of the details of the improvement. In the new form of candle the inventor dispenses with the carbon points which constituted the wick, and uses only the outer surrounding material answering to the tallow of an ordinary candle. We have already seen that this compound—to which M. Jablochhoff has given the name of "Kaolin," which substance enters largely into its composition—consumes at the same rate as the carbon points. From this material alone M. Jablochhoff now produces results superior in many respects to those which he previously obtained. One point of superiority consists in the fact that he is now enabled to produce as many as 50 constant and uniform lights from a single machine of the ordinary kind, as was recently stated in a paper brought before the Academy of Sciences in Paris by M. Dumas. In short, M. Jablochhoff appears to have satisfactorily solved the question of dividing up the electric light by a method capable of practical application, of insuring perfect steadiness in the light so divided, and of distributing throughout the building lights of varying degrees of intensity. These results point to a very wide application of the system, which appears to possess special advantages for the lighting up of theatres and other large buildings. The application of the invention is being brought out in Paris.

### THE LATE JOHN FORSTER'S BEQUEST.

VISITORS to the South Kensington Museum will see the bequest to the nation made by the late Mr. John Forster. In making this bequest he emulated his friend, whose executor he was, the Rev. Alexander Dyce. The two collections now stand fittingly side by side, the Dyce library numbering more than 11,000 volumes, and rich in ancient classics, early English dramas and other poetry, as well as in Italian literature, having been lately rearranged and placed along with the drawings by the old foreign and English masters, the rare engravings, and the miniatures belonging to the same bequest, in the rooms filled for a time with the National Gallery pictures. Of the printed books in the Forster library, some 20,000 in number, the mere enumeration of their titles, briefly described, fills 272 closely-printed octavo pages of the catalogue which Mr. Forster was passing through the press at the time of his death, and the sheets which had then been struck off end without finishing letter "T." The collection of tracts and pamphlets, proclamations, broadsides, and chapbooks is of rare and varied interest. There is an array of pamphlets, a collection in itself, bound in 535 volumes. There is also, as might be expected from the drift of Mr. Forster's studies, a large number of tracts relating to Charles I., the Civil Wars, and the Commonwealth, and to Ireland and Swift; and there are 14 volumes of pamphlets collected and arranged by Lord Macaulay. Among the books are many presentation copies, and volumes enriched with autographs, letters, and notes; books that have belonged to men of mark, or formed part of other famous collections; original editions, rare and privately printed books, illustrated books, and books on art. Addison's "Travels in Italy" has this inscription—"To Dr. Jonathan Swift, the most agreeable companion, the truest friend, and the greatest genius of his age, this book is presented by his most humble servant the author." There is Byron's own copy of "English Bards and Scotch Reviewers," given by him to Leigh Hunt, with Byron's autograph, and many corrections made by him; the original edition of "Robinson Crusoe"; the corrected proofs of four of Dickens's novels; the first editions of Goldsmith's "Traveller" and "Deserted Village"; Pope's copy of Garth's "Dispensary," with autograph notes, &c., bequeathed by him to Bishop Warburton; the proof sheets of Johnson's "Lives of the Poets," corrected by himself; Landon's "Imaginary Conversation," the original volumes, with very large additions in Landon's MS.; "The Dunciad," with this auto-



graph, "Jonath: Swift, 1729. Amicissimi Auctoris Domini;" Pope's "Works," with another autograph, "To the Right Honourable the Earl of Oxford, from his most obedient humble servant, A. Pope"; and the first and second folio Shakspeare. Among the art books may be specially mentioned Hogarth's works, "a rare collection of his own plates, with duplicates, showing various states in which they were issued"; and, what must be particularly acceptable to the South Kensington Museum, a wonderfully illustrated copy of Granger's "Biographical History of England," in 31 folio volumes, containing 5,562 portraits and illustrations. This "Granger," formed by its original owners at a great cost, was still further improved and amplified by Mr. Forster, and it is said to have cost him £800. Thackeray's illustrations to Douglas Jerrold's "Men of Character" are charming, and could be ill spared from the collection. But the case which will chiefly attract literary antiquaries and enthusiasts will be No. 19, containing the MSS. and autograph treasures collected by Mr. Forster. The heart of Dryasdust himself will heat more quickly as he stands before those 39 folios filled with the "Garrick Letters," including those to Edmund and Richard Burke, Mrs. Clive, George Coleman, and the Sheridans. The same cabinet comprises the original MSS. of nearly all Dickens's works, together with the great novelist's autograph correction of the proof sheets of most. Specimens of these, with other most curious holographs, are shown in glass cases, one of which contains the Godwin original MSS. lovingly gleaned from all possible and impossible nooks and corners.

### BUILDING TRADE DISPUTES— ENGLAND AND SCOTLAND.

SEVERAL disputes and strikes of a serious kind exist, or are impending, in different cities and towns in the sister kingdom relative to the wages question, on the part of carpenters, joiners, painters, and other trades. At Manchester the dispute between the carpenters and joiners and their employers is likely to assume a serious cast, if not amicably settled by a compromise—or yielding on either side. At Halifax, Buxton, St. Helen's, and Kirkwall, the joiners are at issue with their employers. At Edinburgh there are strikes on the part of the painters; and at York on the part of a number of the plasterers. The carpenters and joiners of Manchester, numbering 120 firms, held a meeting last month, and then the employers not having granted them their terms, they declared that they would spend the whole of the large funds of their societies, sooner than accept the terms of their employers. It is several years now since a general strike took place in the Manchester district. The men refused to come back to their work at 8½d. per hour.

### ESCAPE OF SEWAGE GAS INTO DWELLINGS.

THE Right Hon. James Stansfield, M.P., who presided at the recent Conference on Health and Sewage of Towns, in opening the proceedings made some valuable observations on the above subject, and which we re-print from the *Journal of the Society of Arts* :—

There was one new and distinct sub-head to which he wished particularly to draw attention, namely, the escape of sewage-gas into dwellings. In his opening remarks last year, he drew attention to that as a new source of nuisance and danger entirely the creation of our modern water-carriage systems. It was much discussed then, but since that time he himself had received not a few communications, leading to the inference that the attention of gentlemen in the various localities where water-carriage sewage existed, and of sanitary engineers, had been much addressed to this subject. It was a difficulty and a danger not yet surmounted, but he believed it was possible entirely to prevent and avoid it. Some progress had already been made, and he hoped that those who had special knowledge on the subject would give the conference the benefit of it. There was a rule laid down that untried schemes should not be discussed; and although, at first sight, this might not recommend itself to the minds of the more enthusiastic persons—anxious to discuss the newest system which could be submitted for their consideration—he did not think it would be found that any subject, or scheme, which it was really worth discussing, had been excluded. But, having regard to the variety of methods, and the number of localities represented, and that their primary object was to collect and

collate experience in English localities, he thought they would all agree that this was a prudent rule to maintain. He had no change of opinion to express himself. He felt that, in large and dense populations, there was much to recommend a water-carriage system. It was scientifically the most complete, the most decent, and, under favourable circumstances, the best adapted for large populations; but, on the other hand, it was a system which involved a very considerable capital outlay, a system attended with difficulties at the point of junction between the sewer and house, and again at the outfall. None could say that the problem of dealing with either of these points was yet absolutely solved, and entertaining those views, he thought it well that they should enjoin a certain amount of prudence and caution on sanitary communities, and warn them against embarking rashly on large schemes of capital expenditure for the disposal of their sewage. One or other of the dry systems, more or less scientifically complete, had certain advantages in some cases. They involved less capital outlay, and though they might be, to some extent, a nuisance, they were not subject to the objection of being dangerous in the way in which sewer-gas was dangerous; and they had this advantage in the present transitional state of public knowledge upon the question, that they were the most easily modified and improved, or put altogether on one side when the time arrived to substitute something more perfect. At the conclusion of last year's conference, the Executive Committee summed up the results; and, as a starting point for this year's discussion, he might draw attention to the conclusions then arrived at, and he would ask his hearers, as the discussion proceeded, to bear in mind the points then arrived at, and to consider whether in the interval there had been any occasion to modify any of those conclusions, or in what respect it was desirable to advance beyond them. The first conclusion was to this effect, that under certain favourable conditions a sewage farm, if properly conducted, was apparently the best method of disposing of water-carried sewage. The second proposition was to the effect that there were various methods of dealing with sewage at the outfall, by subsidence, precipitation, or filtration, and by one or other of these methods a sufficiently pure effluent could be procured. Passing for a moment over the third, the fourth was that with regard to various dry systems, if they were properly carried out, the result appeared to be very often satisfactory. The fifth was that the old midden or privy system in populous districts should be prohibited by law. The seventh was to the effect that it was conclusively shown that no one system could be adopted for universal use, and that different localities required different methods to suit their special peculiarities. With regard to all these conclusions, this general over-riding one seemed to apply, that in all these cases, whether of water-carriage system or of a dry system of whatever kind, they had no evidence that any one such system had been or was likely to be conducted at a profit, and therefore they felt it their duty to warn sewage authorities to be careful before embarking in large and costly schemes requiring large outlay of capital, under the idea that they might be rendered profitable; and secondly, that putting the question of profit on one side, the sensible thing to do was, to ascertain in each case the system best adapted to the difficulties and requirements of the locality, which might be carried out at the lowest possible capital outlay and annual expenditure. The third conclusion, which he had passed over, referred to the subject which he had already spoken of, namely, that in towns where the water-carriage system was employed, a sufficient fall, thorough ventilation, proper connection of the house-drains with the sewers, and their arrangement and maintenance in an efficient condition, were absolutely essential to health; and on this he must say one word more. He desired to present that to the meeting in a light which was to himself a new one. He wanted his hearers to ask themselves what was the implied contract entered into between the local authorities and the individual when a water-carriage system was brought into operation. The community laid down the sewers, and the individual householder was compelled by law, or ought to be compelled, to drain into these sewers, and the implied contract he thought on the part of the community was this:—If you will carry by your system of house-pipes the sewage to the main sewer, we undertake to carry it away so that it shall not be a nuisance, or the sewers a danger to yourselves or to the rest of the community. But the question arose, whether under the existing state of the law the community could fulfil the contract, and, if it could not, whether it had a moral right to call on the individual to submit to these regulations, unless it obtained powers for itself which

would enable it to fulfil its part of the contract. They came to the conclusion last year that there was no reliable means at the point of junction of the sewer with the house-drain, by which the sanitary authority could undertake that there should be no escape of sewer gas back into the house. He was not aware that there was any method by which, at the point of junction of the drain and the sewer, you could absolutely ensure that result, and if you could not do it at that point, you must carry your point of juncture, where the difficulty arose, higher up to the outside wall of the house, from the sewer to the drain. If you could say that the duty of the community could be accomplished otherwise, the proposition would be answered; but, in fact, you must consider, first of all, whether it was not a part of the implied contract that the local community was to deal with the sewage placed in its charge so as to prevent its being a nuisance or source of danger either to the individual householder or any other part of the community. It seemed to him that this was one of the most important practical subjects to which they could devote their attention.

The several papers sent in to the Society of Arts, and taken as read at the Conference, will, together with the two days' discussion thereon, be printed in *extenso* in the society's journal, and also in pamphlet form, price 3s.

### TO CORRESPONDENTS.

"RESTORATION."—Church "restorers" and others are beginning to be subjected to a hotter criticism than heretofore. Much injury has been done by some restorers, and criticism is needed to point out their faults and folly; but a system of indiscriminate criticism is unjust, and likely to prove mischievous and injurious to the interests of Architecture.

BUILDING SOCIETIES.—Some remarks which have been called for by recent events appear in our present issue; but we will likely return to the subject, and deal with the interest involved in a more specific manner.

A CITIZEN.—The Local Government Board, in default of the authorities to carry out the work, have power to execute it, and sue for the cost. A meeting of the ratepayers, followed by a deputation, would hasten the issue.

"GEORGE SIMPLE."—No memoir of this Dublin architect, to our knowledge, has ever appeared; but in some of our back volumes scattered notes of his life and works will be found, and a summary of his "Diary of the Re-building of Essex-bridge," inclusive of his volume on "Building in Water."

P. O'F. (Swincford).—Order to hand. We have complied with your request.

N.B.—The article is quite unsuitable for our columns.

ARCHITECT (Cork).—See third paragraph under head "Notes" in each issue.

W. J. F. (Beljust).—Drawings to hand; thanks.

RECEIVED.—J. R.—E. M.—Finglas—Assistant Architect—(Thanks)—"An Operative of the Old School" (Under consideration)—C. E. (London)—B. A.—W. C., &c.

### HOME AND FOREIGN NOTES.

ARCHITECTURAL ASSOCIATION OF IRELAND.

—At the monthly meeting of this body, to be held on Thursday evening next, at the rooms, 212 Great Brunswick-street, Mr. Thomas Drew, R.H.A., will read a paper on "Artisans' Dwellings."

THE ARCHITECTURAL ASSOCIATION (LONDON).—At the meeting of this association held on the 11th ult., Mr. H. C. Boyes in the chair, regret was expressed for the death of Mr. Edmund Sharpe, M.A. At the same meeting a paper was read by Mr. Lewis H. Isaacs "On the Application of the Artisans and Labourers Dwellings' Act, 1875, to some of the Courts and Alleys of the Metropolis." A discussion followed on the part of several of the members. A visit was made by a number of members of the association on the 19th ult. to Sir John Soane's Museum, Lincoln's-Inn Fields.

CELTIC PROFESSORSHIPS AND PHILOLOGY.

—According to the *Academy*, Professor Windschil, known as an excellent Celtic scholar and as the first editor and translator of an important philosophical Sanskrit work of the Jains, has been appointed successor to the late lamented Professor Brokhaus, the eminent Leipzig Sanskritist. He will exchange his present university of Strasburg for that of Leipzig in the autumn. Thus Celtic philology will henceforth be duly represented in Germany in its leading philological university.

PREVENTION OF CORROSION IN IRON.—A summary of the excellent paper read by Professor Barff, M.A., at a recent meeting of the Society of Arts, and of the discussion thereon, has been issued, together with the reprint of the notice of the process that appeared in the *Times*, and a list of some of the forms of ironwork affected by the process. Professor Barff's invention is certain to work important revolutions in the future of iron and its utilization in building construction, and in a variety of other directions.

PURCHASE OF A MUSEUM.—The Kirkwall Archaeological Museum, belonging to the late George Petrie (a namesake of the late Irish Antiquary), has been sold by auction, and purchased for the Antiquarian Museum, Edinburgh.



**DEATH OF AN OLD ARCHÆOLOGIST.**—The death is announced of Mr. John Kenrick, well known from his work on Phœnicia, and his "Ancient Egypt under the Pharaohs," as well as numerous archæological works. He was 90 years of age.

**A MASTER IN MODELLING.**—M. Dalou, whose terra cottas have attracted deserved attention in our annual exhibitions, has been appointed master in modelling at the training schools, South Kensington. He is the second foreigner who has received an appointment on the staff, M. Legros having the etching class under his direction.

**MARYBOROUGH DRAINAGE.**—At the last meeting of the guardians of the Mountmellick Union it was announced that only one tender (that of Mr. J. J. Long, of Dublin) had been received for this work. The clerk having remarked that the amount of this tender (£775) was one-half more than the sum set down in the estimate, the further consideration of the matter was postponed for the present.

**FINE ARTS PRIZES.**—The jury of the Exhibition of the Fine Arts has awarded the three grand prizes for the present year. The two medals of honour, of the value of 4,000*fr.* each, were given, for painting, to M. Laurens, for his picture (No. 1,226) representing "The Austrian Staff in Presence of the Body of General Marceau;" and in the section of sculpture to M. Chapu, author of the "Statue of Berryer" (No. 3,643), and "Thought," a model in plaster. The Prix du Salon was adjudged to M. Henri Peinte for his "Sarpedon" (No. 4,061) in plaster.

**THE BRITISH ARCHÆOLOGICAL ASSOCIATION.**—At the twelfth meeting of the British Archæological Association for the session a large collection of Roman remains, recently found at Sittingbourne, Kent, were exhibited and described. These consist of fictile vessels of great variety of texture and form, there being many specimens of Upchurch ware of the usual black colour, but the larger number being of reddish and light earth, all probably the manufacture of the district. Three charming glass flagons were also found and shown, and were much admired for their perfect condition and delicate fabric. Many personal ornaments were also exhibited. The whole series is the result of excavations in the neighbourhood of Sittingbourne, where the disturbance of the soil for brickmaking has revealed the unexpected presence of Roman interments over a large area of country.

**ICELANDIC JOURNALISM.**—A type foundry in St. Paul has lately furnished the types for the *Framvavi*, an Iceland newspaper, to be published in the Icelandic colony at Keewatin, on the Red River, in British territory, about 60 miles from Fort Garry. This will be the first newspaper published on the American continent in the Icelandic language. The preparation of the types required the greatest care. They are in the Roman alphabet, but with a great many peculiarities in regard to accentuation, and are of a very antiquated form. The Icelandic language is something like the Norwegian language as it was spoken about a thousand years ago.

**THE STATUE OF MGR. DARBOY.**—The statue of Mgr. Darboy, Archbishop of Paris, who was murdered by the Communists, has been placed in the Cathedral of Notre-Dame, in the Chapel of St. George, where the statue of Mgr. Morlot formerly stood. The work was commanded by the City of Paris, and the sculptor, M. Bonassieux, represents the regretted prelate at the moment when he is falling mortally wounded. With his right hand he blesses his murderers, whilst with his left he supports himself against the wall, and on this spot the sculptor has placed a gilt palm branch, and near it the inscription: "24 Mai, 1871." The figure is of life size, is placed on a base of stone, 2 ft. in height, from the Jura, and faces the group of St. George killing the Dragon.

**GEOLOGY AND WATER SUPPLY.**—The boring experiment, says the *Athenæum*, made by the Diamond Boring Company at the brewery of Messrs. Meux, in Tottenham-court-road, London, has resulted in disappointment, so far as the supply of water goes, but it has settled a most important geological problem. Somewhat suddenly the borer has passed from the lower green sand into a stratum well marked by fossils, which Mr. R. Etheridge, the palæontologist to the Geological Survey, has pronounced to belong to the Devonian rocks. The whole of the secondary rocks below the cretaceous system are missing. No traces of the coal measures, or of the carboniferous limestone below them, are found. Old red sandstone, upon which the tertiary formations have been deposited, form the base of the deposits in the valley of the Thames. This settles for ever the question of the existence of coal near London.

**PRESERVING TIMBER.**—At a recent meeting of the Philosophical Society of Glasgow, Mr. Deas, C.E., read a paper on "The Gardner process of Seasoning and Preserving Timber from Decay." It was claimed for this process—1, that it seasons timber of all descriptions more thoroughly and rapidly than any natural or artificial processes at present in use; 2, that while thoroughly seasoning timber, it also preserves it from decay; 3, that by impregnating timber with a certain solution it can be further fortified against decay; 4, that the timber by similar means can be made invulnerable to all worms and insects; 5, in a similar manner it can be rendered non-inflammable; 6, it strengthens the timber; and 7, that by it timber can be permanently stained and coloured to a variety of shades. It was stated that it was only eighteen months since experiments were made outside of the firm's own works in Glasgow, where it has been in use for three or four years. By a chemical process the sap was dissolved, and then the moisture left in the timber was drawn out, the whole operation only taking from four to fourteen days, according to the density and bulk of the timber so operated on. Specimens of prepared timber used as pit props were exhibited, which after being down ten months were taken up quite sound, while a prop without the process was considerably decayed. Another experiment had been made with a prepared sleeper put into the tunnel of the North British Railway at Queen-street alongside of others prepared in the usual manner. It was found that the sleeper which had been submitted to the Gardner process was quite fresh after the others had shown signs of decay. The paper also referred to the excellent results which had been obtained from the prepared timber in the cabinet work of Messrs. A. Gardner and Sons and in other cases; and pointed out the advantages which were to be gained by its use over wood in its natural state. Some shavings of the ordinary wood were burned in presence of the meeting, while shavings rendered non-inflammable by the process could not be burned. In the course of discussion Mr. John Jex Long mentioned that the extracting of resinous matter from wood was not new, as he did it regularly himself, and a patent had been taken out by a gentleman in London for rendering lucifer matches non-inflammable after having been burned for a certain length. Dr. Wallace expressed his regret that the society had not been told more about what the process really was, but perhaps if it was not patented that could scarcely be looked for.

### "REVIVAL OF ANCIENT IRISH ART IN BALLINASLOE."

"A VERY beautiful piece of monumental art, which has attracted the attention of a great many of the clergy and gentry of the districts surrounding Ballinasloe, is just in the last stages of the finish of execution by the artist, Mr. Patrick O'Flynn. The design is original, and thoroughly Irish; the execution carried out with a degree of vigour, ease, and grace truly marvellous. It consists of an old Celtic Cross cut out of a large limestone block, the panels of which are tastefully surrounded by exquisitely carved roping borders. On the front panel of the Cross is carved an exquisite figure of the Crucifixion. The nails on the hands and feet, the crown of thorns on the head, and the swelling in the vicinity of the nails have been admirably shown forth; the expression of deep anguish on the face of the dying Redeemer has started into life from the cold stone beneath the subtle hand of the chiseller. Beneath this is a hammer, a large nail, and a pincers, and immediately above it is a beautifully seraphic vignette of an angel with wings expanded, just as if alighting on the Cross, and with the happy tidings of man's redemption on his lips. Standing on the panel of the old Celtic Cross is a finely-carved figure of St. Michael with the trumpet in his hand, and looking down into the grave beneath him and beckoning with his finger, as if admonishing the dead ashes to prepare for that terrible warning which shall annihilate the earth and spheres; while in the other hand he holds the trumpet in readiness to sound the last warning which the earth shall hear and heed—"Arise and come to judgment." On the opposite panel St. Patrick stands out boldly with the crozier firmly grasped in his left hand, while the right triumphantly holds up to the enraptured gaze of the beholders the shamrock by which he exemplified to the Irish Chiefs at Tara the sublime mystery of the Trinity. The edges of this panel are beautifully and artistically bordered with shamrocks. The inscription slab into which the Cross is to penetrate is very finely finished, the polish exquisite, and the design chaste and beautiful. The first panel contains the inscription. The opposite panel contains a most expressive and really perfect figure of an angel in a kneeling posture, fervently gazing into the firmament with a pleading and earnest face. Around this panel are whole groups of shamrocks, large bunches of luscious grapes, chiselled out with the greatest delicacy, very ripe and soft-looking, and just ready to drop from the bunch. It also contains some strawberry leaves scattered here and there. This slab will rest upon two others, on which are very appropriate figures emblematic of our ancient civilization and nationality. On one is cut out the ivy nicely creeping along the rough rock, with an olive branch in the end, on which a dove is very perfectly exhibited in the act of plucking a leaf off the branch. On the other end is a lily. The second slab is a complete picture in itself. In its centre is the harp of Brian Boru, at each of which are two scrolls bearing the motto "Our Country" in the mother tongue. The old capital Celtic letters are very finely cut out. On the right end is an old Celtic Cross, while the left is fittingly occupied by an old Round Tower, which guards with unflinching vigilance the antiquity of our literature, our music, and our architecture. The combined piece of whole art vividly brings to the mind the early part of the twelfth century, when the Irish were such able masters of the chisel. It recalls to the minds of the Irish beholders the flourish, the struggle, and the decay of their ancestors' incomparable art. A long and glorious review of the ancient history of Irish Architecture, Irish Painting, and Irish Sculpture, well known to the historian and the antiquarian, unfolds to our view in profound silence and striking sublimity its glittering pages. It summons up the effigies of the Saxon and Gothic savages of the twelfth and earlier centuries—devoid of learning, devoid of science—bursting in upon this country, the then centre of civilization—the nation from whose lamps the oil of Christianity was lighted—destroying and banishing civilization from the land. Once more we see before us the work of Irish genius, and while gazing on it we are forcibly reminded of the neglect with which any manifestations of Irish genius or enterprise have been met for the past seven centuries. No fostering hand extended to help, no cheering voice to urge it on, no wonder that at its very inception it should shrink up and wither and decay. We understand Mr. O'Flynn is about to stay at home in Ireland, to give his countrymen the benefit of his genius."

[The foregoing article appeared in the *Western News*, published in Ballinasloe. We have yielded to the request of a subscriber to reproduce it in our columns. The descriptive powers of the writer, in an Art direction, can be weighed by the above sample, which will no doubt force a smile on the faces of not a few of our readers.—Ed. I.B.]

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Illustration.

COMPETITIVE DESIGN FOR THE NEW TOWN HALL,  
WAKEFIELD.

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THE IRISH BUILDER.

VOL. XIX.—No. 420.

RIDING THE FRANCHISES—  
ANCIENT AND MODERN.

SECOND PART.

E gave in our first paper an historical review of the origin of the early charters, customs, and liberties of the city; and also an account of the more ancient forms of the city pageant and perambulation known as "Riding the Franchises." We shall now describe the more modern manner of surveying and perambulating the city liberties every third year, as was carried out in the last century, down to 1772, followed by an account of the subsequent modes of conducting the perambulations after that date, and continued by the civic authorities of the old corporation until the abolition of that body. The Lord Mayor and the different minor corporations or guilds being assembled, each headed by their masters, all gaily attired, and carrying with them the implements of their respective occupations, proceeded according to the programme cited here. In their perambulations they took stations in different places on their route, where they halted and called courts. These places on the route are marked in the description by daggers:—

"They drew up at the old Custom House, passed along Essex-street, Temple Bar, to the east of Lazer's-hill, from thence to Rings End, and so to low water mark, where a dart was cast into the sea. From thence they crossed the strand to Blackrock,† and so westward to a Red-house on the east side of Merrion.† From thence through a garden at the back of the Red-house, and across the field to Simon's Court, from thence across the fields into the road to Bray, and then southward along the said road to two little cabbins on the south side thereof. From thence they crossed the fields into the road to Clonskiagh opposite to a mill on the river of Donnebrook; from whence they passed along the road to the bridge of Clonskiagh, passed under the east arch along to the mill of Clonskiagh and so to Clonskiagh lane;† and from thence along the lane to Milltown-road, and then northward to Mr. Roberts' house on the said road, which they passed through, and the garden belonging to it, across the fields to Donnebrook road, near a cabin on the right hand thereof; from whence they proceeded northward along Donnebrook-road to the

sign of the Currant-tree, on the west side of the road, and from thence by the south end of the house through the garden, and across the fields to the back of Mr. Leeson's house, at Stephen's-green, till they came to the corner house of St. Kevin's-port. From thence they passed by the west side of Kevin's-port to and through Big Butter-lane to Bridge-street, and along Bride-street to Bull-alley, and down it, to the house formerly Counsellor Swift's, which, and the garden thereof, they passed through into Patrick-street, and from thence to the sign of King William and Queen Mary, on the west side of the street to the Coomb, at a great stone that stands in the street; and thence along the Coomb by the Water Course to Crooked-staff; from thence over the wall on the west side of Crooked-staff, between the willow trees, and along the Water Course, into the road to Dolphin's Barn, from thence they proceeded northward across the fields, and through the garden and Red-house at the north end of Cut-throat-lane. They then directed their way to Bow Bridge, and passed under the middle arch of the said bridge, and then into the Hospital Fields over the Old Deerpark-wall, near the Old Slaughter house, from thence through the Hospital Fields, and across the Liffey Strand to a road stone by the Deerpark wall;† they passed over the Deerpark wall, and through a part of the park to a corner of the wall near the dog-kennel, on the north side thereof; from thence over the said wall northward, and passed along the same to the first half round, or rising on the said wall. Thence they proceeded eastward through Mr. Brownlow's fields, and several gardens, to Stonybattery, on the south end of Mr. Addison's house, and from thence through a house at which hangs the sign of the Half Moon, on the east side of Stonybattery, and through the gardens to Colonel Stanley's house, and through the said house to Grange-Gorman-lane; from thence by the south end of the Half Moon on the east side of Grange-Gorman-lane, through the gardens into Finglas-road,† and from thence northward to the Broadstone. From thence through the Water Course that passes by the stone, and through the garden into Drumcondra-road;† thence southward to a little cabin at a well,† in a garden on the east side of the road; from thence through the gardens to the sign of the Coach and Horses in Ballybough-lane to Ballybough Bridge, from thence across the river, and along the strand to Clontarf, and so to the Shades of Clontarf; and from the Shades of Clontarf forward to the Mill of Raheny, and from the mill northward one hundred and thirty perches, to a little brook, which is the end of the liberties of the City of Dublin."

In the light of the above document the citizen of to-day can mentally perambulate the city, and conjure up many old scenes, sites, and associations; and to the student of local history it will be full of suggestiveness. With the aid of Speed's Map—and later maps—and Rocque's Map, and others in the last century, for instance, the maps in "Poole and Cash's Views," and in "Malton's Views;" or those in the old Dublin directories towards the close of the eighteenth century, a world of comparison may be drawn, and much that would be otherwise obscure made plain. There is a reliable bit of local history indicated in this account of the city perambulation above cited, valuable in many ways as to names of persons and places, and enabling us to see what features once existed on the route, but which for long years have ceased to exist.

We are not aware that any detailed account exists in any of the files of our old newspapers or magazines of the last century descriptive of the "Riding of the Franchises;" nor do we remember at present of any engraving illustrative of the pageant. Some other national events and customs have been well drawn and illustrated by native and foreign artists; but the old city pageant on its march, or drawn up in front of the old Tholsel in Skinner's-row, or at the old Custom House in Essex-street, would have afforded a good subject for the canvas or pencil of the artist. Short paragraphs, to be sure, were given in the Dublin newspapers of the last century on the occasion of the triennial perambulations, and these events were

also recorded in the old *Gentleman's Magazine* of London. For instance, in the latter print for 1755, there is the following short account of the "Riding of the Franchises" for that year:—

"Dublin, August 12.—The liberties and franchises of the city were rode and perambulated by the Right Hon. the Lord Mayor [Alderman Hans Baillie], attended by the High Sheriffs [Messrs. Phillip Crampton and Timothy Allen], and the several corporations in their order. The grandeur of the procession is beyond all conception. The estimate of the expenses of the different corporations laid before the City Treasurer for disbursement amounted in the whole to £38,000. These franchises are rode once in three years."

In the Dublin *Freeman's Journal* for 16th of August, 1770, the pageant of the preceding day is thus described:—

"Yesterday the Right Hon. Sir Thomas Blackhall, Lord Mayor, and Kilner Swettenham and Anthony [subsequently Sir Anthony] King, Esqrs., Sheriffs, attended by the Master, Warden, and brethren of the corporations, perambulated the liberties and the franchises of this city according to triennial custom. Though the number rode was less than usual, that deficiency was amply compensated by the general uniformity and richness of the clothing of each corporation, which, with the number of carriages (whereupon were exhibited several of the arts and manufactures), rich furniture, and equipage, made a most elegant appearance."

Two years later, as already stated, this elaborate triennial pageant was abolished by the Lord Mayor's proclamation, and the future perambulations carried out were performed with little parade. They took place, as previously, every third year, in the month of August, on a day when there was a spring tide, at the ebb of which the greatest extent of the Lord Mayor's jurisdiction, by the throwing of his dart into the sea, was determined. The Lord Mayor proceeded with a small retinue, going round as described above. In the course of the route a few ceremonies took place in the liberties of St. Sepulchre, or Bishop's liberty; Earl of Meath's liberty, in Thomas-court and Donore, and the manor of Grangegorman, when the sword was taken possession of by the people of those liberties and carried by them through them. At the time of receiving the sword, the people generally made a request of the Chief Magistrate, which was commonly complied with, and which was, in general, to liberate some offender, not guilty of capital offence. The day was ended with a dinner, and the usual accompaniments of civic banquets. Merrion Strand and Blackrock on these days were gay and bustling places, full of life and jollity. The sight of the franchise men were eagerly watched, and shouts were raised when the horses and carriages came gallantly on from the city, and thronged these marine villages to suffocation. On these occasions were to be seen light-clad couriers dressed in knee-breeches, sky-blue cloth jackets, and seal-skin caps, running before the civic carriage. Before the latter, perhaps, a sturdy, smart-visaged fellow might be observed bearing a sword as large, or nearly, as that described in "The Castle of Otranto."

The rush of persons was often tremendous when the returned cavalcade drew up outside the Tholsel. Musket men there announced by a volley that the franchises were ridden, and the sword-bearer held the sword high above his head, and after waving it three times flung it into the centre of the crowd. The scramble for the weapon was wild but short, and the winner held it up amid the acclamations of the people. On some occasions unusual excitement and



anxiety was evidenced in anticipation of the pardon of an offender—it might be a father, or a brother, or, again, a sweetheart; and the prize might be contested and won by a maiden, who, with her friends or companions, might immediately proceed to Newgate and knock boldly, and with no misgiving, for the release of her lover.

The Lord Mayor's jurisdiction in our grandfathers' days was certainly determined by a simple and primitive process. It would be a novel sight now to see a portly chief magistrate riding at low-water mark to the very water's edge, and from thence throwing his dart as far as his strength allowed him, for, according to ancient custom, where it fell was the boundary of his power.

When all the city guilds attended in the last century the sight was one of garish show and civic splendour, but it was mostly, if not altogether, at the expense of the public funds. The sum of £38,000 expended in 1755 was a very large sum, indeed, at that period; and, whether in part supplemented by private donations or subscriptions on the part of the guilds, the sum was extravagantly large. There is only too much reason for believing that the city estate and the pockets of the ratepayers ultimately bore the burden of these triennial displays. There could be little objection to the renewal of the custom of "beating the bounds" as far as parishes in themselves are concerned. It would make a little bit of holiday play for schoolboys and ecclesiastical vestrymen. The question, however, of the revival of "Riding the Franchises" as they were once rode, on what is called the "grand scale," is out of the question, and could never be attempted in these days with any chance of success, at the cost of the ratepayers or the funds of the Corporation.

The annual Lord Mayor's Show in London is becoming—indeed it has long become—in these utilitarian days to be looked upon as sham and a public obstruction; and some reformers have not hesitated to describe it as a nuisance. Compared with the London display, the Dublin one is but a poor and shadowy reflex. There is no doubt but the abolition of Lord Mayors' annual pageants, such as they are at present, is only a question of time; and the time that shall witness their extinction is not very distant. Though we may regret, and do regret, in many instances the passing away of old customs, we feel that it is impossible to resist what time and progress has doomed to decay. The tendency of the time is to ask a reason for the existence of this and that thing, irrespective of sentiment; and we fear many other customs beside those adverted to are doomed to be swept away, because no proofs can be offered that they are useful, or worthy of preservation.

We have now given the reader a pretty fair and comprehensive outline of the history, origin, and associations connected with the "Riding the Franchises" in Dublin. In our next we may add a sequel affording some interesting particulars of the old Tholsel building and headquarters of our Corporation in the last century, and also give some account of the old city guilds and their halls, with other incidental matters.

TESTIMONIAL TO SIR JOHN STEEL, R.S.A.—A meeting has been held of the acting committee of the proposed testimonial on the 23rd ult., and it was reported that the subscriptions promised to that date amounts to £1,930.

### ARCHITECTS' ASSISTANTS.

THERE is no doubt but that in this country the practice of an architect is due more to interest than to straightforward merit; although there are some—alas, but few—instances in which merit received its reward; and on this subject, between practising architects and their assistants, we desire to say a few words.

We have heard lectures to the latter, both at the English and Irish associations, given by leading architects, telling them that to them is entrusted the future or reversion of architecture in all its bearings; and that they must make all efforts, study well, struggle and obtain experience, especially in practice, in order to take up the work with confidence and credit when the seniors have ceased their labours. All this, and much more, seems well in theory, reads well, and is praised as good advice. Let us, however, throw aside the flowery covering of words, and, coming to the reality, examine the practice, so to speak, of these juniors, the hope they have of success, and the disadvantages which beset them.

Here an architectural assistant may be defined as a qualified architect, paid a nominal stipend to conduct the office routine. He seldom oversees work, or does more than what is known as "paper architecture;" and all his time during the day is given to his principal, and justly so. When the office closes his liberty commences—that is, as a rule, liberty to go a round of pleasure according to his taste and means—or, to put it in a homely phrase, read till bed-time, then often to dream of office work, and resume its dull monotony in the morning. But once let that assistant commence a quiet little practice for himself during hours after office, he immediately finds the whole jealousy of the profession fronting him as a trespasser, and too often as one not to be trusted in his office. We do not wish to include all architects in this, for we could name many honourable and praiseworthy exceptions; but this we know, that so much do the nine-tenths of the assistants feel this to be true, that a dread of the consequences of meeting the anger of their employers not only keeps them from seeking practice, but prevents them accepting many an offer which might prove of incalculable advantage to them.

We regret that it is our painful duty to record facts like these. We regret to see a young qualified architect, whose hope of life's success lies in his profession, and who, bound to serve another as a means of livelihood, labouring under a consciousness that the first client he gets may be the means of depriving him of his daily bread. An instance of this came under our notice, where a gentleman assisting an engineer—who, besides engineering, enjoyed a large architectural practice—was called on by a client who employed him to make plans, &c., for certain alterations. This gentleman gladly undertook the work, and made the necessary drawings for it at night, long after office hours; but when he dared to call a contract for it by advertisement, he received a polite notice to quit, his principal telling him that he had not sufficient work to keep him on; but told a friend it was on account of his commencing to practise on his own behalf; and, when seeking another assistant, stipulated that he should give an undertaking to do no private work. We could give other instances of similar hard treatment, and such like undertakings, which in some few cases are qualified by such an inducement as "unless, perhaps, tracings for builders."

We have known an assistant who advertised a small "job" to be told it was the worst thing he ever did, and that he should have called a contract "on the quiet"—"for few architects would care to employ him as an assistant under such circumstances."

Treatment of this kind we have known to be sternly persisted in by those who employ other architects' assistants to help them at night, for when the cap fits it is sometimes convenient to wear it.

We can call this nothing more than downright tyranny, and of that bitter, jealous description that it would be far more to the advantage of the profession if it were quelled at once, and a recognised system floated to guide architects and their assistants in this respect; and toward this end we earnestly call the attention of the Institute, which, if willing, can easily find a means to so desirable an end.

There is yet, however, one channel—bad as it is—in which an aspiring assistant can work fearlessly if he likes, and that is, competition. We are not admirers of competitive work as a rule, for, from the dishonest name it has won itself, it presents very little encouragement; but still there is a hope of success, small it may be, but still a hope, and here by that delightful safeguard, a *nom de plume*, an assistant may enter a large but dubious practice. Even in this again we follow the antagonistic spirit of the times. It is sad to watch the disappointment caused by a rejected but well-considered design, and sadder still to contemplate the consequences the author fears from the small gratification he could wish to have by publishing his design.

Although the publication of architectural drawings is the means of mutual instruction, in which the desire to promote is a laudable ambition, still it appears to be considered a method of advertisement on the part of an assistant. For this reason many a creditable design is reluctantly withheld, as it is hard to be told, "Don't make a fool of yourself," or, "You have a great amount of cheek."

That this intolerable spirit of jealousy exists is well known; and we trust that, by giving publicity to it, it may be conquered, and an understanding will exist in future, that so long as an architect's interest in his business is not encroached on, the assistant may endeavour to make his way in the profession he has chosen. B.

### ADVERSARIA HIBERNICA,

#### LITERARY AND TECHNICAL.

SWIFT has left us a very humorous poetical description of his friend Dr. Delany's garden at Delville, Glasnevin; but he greatly contracted the size and features, though he preserved the likeness in the reduced scale. It is said of Delany that, like Pope, he compressed a vast deal of beauty in a very small spot of ground. Houses have often been described in a variety of ways in respect to their architecture and surroundings; but Delany, in his poetical lines "On Gaulstown House," divides honours with Swift by his humorous description of its peculiarities. The house which he burlesqued, but still told some facts about, belonged to his friend George Rochfort. The "Poor Lady Betty" alluded to was the daughter of the Earl of Drogheda and the wife of George Rochfort. The lines are worth quoting:—

"'Tis so old and so ugly, and yet so convenient,  
You're sometimes in pleasure, though often in pain in't;  
'Tis so large you may lodge a few friends with ease in't,  
You may turn and stretch at your length if you please in't.  
'Tis so little, the family live in a press in't,  
And poor Lady Betty has scarce room to dress in't.  
'Tis so cold in the winter, you can't bear to lie in't,  
And so hot in the summer you're ready to fry in't.  
'Tis so little, 'twould scarce bear the weight of a tun,  
Yet so staunch, that it keeps out a great deal of sun.  
'Tis so crazy, the weather with ease heats quite through it,  
And you're forced every year in some parts to renew it.  
'Tis so ugly, so useful, so big and so little;  
'Tis so staunch and so crazy, so strong and so brittle;  
'Tis at one time so hot, and another so cold—  
It is part of the new, and part of the old:  
Too bad for a blessing, too good for a curse;  
I wish then, dear George, it were better or worse."

Gaulstown House, as Delany describes, is certainly a curious compound and paradox; but it is a satisfaction to learn from the renowned doctor that it was too good for a curse, notwithstanding it might be too bad for a blessing. Thousands of speculative or "Jerry" houses are now-a-days run up—contracted and crazy, brittle, and big and little and ugly, too hot in summer and too cold in winter, rotten and unhealthy—which deserve to be well cursed, with their builders to boot; and the more they are cursed, and the greater



the indignation roused by such curses, the greater the public blessing, as it may likely have the effect of sweeping them off the face of the land, and making the country too hot for those who erected them.

An interesting description of the house of a wealthy and hospitable Irish gentleman—residing in Ireland in the days of Swift—Thomas Matthews, of Thomastown, in the County of Tipperary—will be found in Sheridan's "Life of Swift"; but we are under the impression that we have given in former notes some particulars of that mansion and its owner, so those particularly interested can refer to the volume named.

O'Halloran, in his "History of Ireland," devotes some attention in his volume to the ancient arms of Ireland, being convinced that each province must have had its peculiar arms. Our native historian found out subsequently that some of his conclusions were erroneous. In 1793 O'Halloran wrote a paper in the *Anthologia Hibernica*, affording fuller information on the subject of the arms of Ireland. He says in this communication that some years previous he applied to Sir William Hawkins and to Mr. Withens, of the Heralds' Office, Dublin, and that he there learned that the provincial arms were:—For Munster—On a field azure, three eastern diamonds proper. For Leinster—On a field vert, a harp or strung argent. For Ulster—On a field, or a lion rampant, double-queued gules. For Connaught—A party per pale argent and sable; on the argent side a demi eagle spread, sable; and on the field, sable, a hand and arm holding a sword erect. But, as Meath was one of the old divisions of Ireland, he said he could not give any information with regard to the ensigns of it, though formerly the imperial province, nor of the Irish crest. He prosecuted his inquiries at the Heralds' College, London, and here he was informed that the crest of Ireland—as used by our own princes in tilts and tournaments on the Continent, and afterwards by some of the Henrys and Edwards—was a bleeding hind, wounded by an arrow, under an arch of an old castle; but the arms of Meath were still to be discovered. O'Halloran consulted some of the gentlemen as to the arrangement of the arms, as he had formed the frontispiece to his History, in which a female representing Hibernia was to be placed, holding these arms on a shield. He tells us they could not agree as to the propriety of quartering the arms on one shield, nor to the supporters, without proper authority; but they suggested that the arms of each province might be introduced in a separate escutcheon, the knight holding one, and the *ollamh*, or doctor, &c., the other, &c. It appeared to O'Halloran that they should be all quartered on one shield with the crest over them, covered by an imperial crown, including the combinations of the whole to comprehend the arms of the nation. But, not wishing to go retrograde, he says, to such respectable authority, and besides wanting the arms of Meath, he thought his frontispiece, though otherwise fancifully and elegantly designed, had better be postponed to another edition of his book.

He further writes, that he had read some old Irish manuscripts, and found O'Flaherty's "Ogygia" furnished him with an authority that the arms of Irish monarchs were—a king enthroned in majesty, with a lily in his hand, on a field "Satur." This he concluded must be the arms of Meath, as it had been ceded at an early period to the monarchs to add greater splendour to their elevated station, and has been always called "Fearinbaird, Ard-Righ Erión," or the mensal lands of the monarchs of Ireland. Persuaded of this truth, O'Halloran had the arms neatly finished some years previous to the time to which we are referring, and these, as the arms of Meath placed on an escutcheon, in the centre of the shield, as being the constant dowry annexed to the monarchy. Whatever doubts, he says, he still might entertain on the subject have been long since done away by his esteemed friend Ralph Ousley. The latter gentleman complained to O'Halloran

that the arms were not classically placed, and that he (Ousley) had met with them otherwise arranged, and the metals, or fields, different. O'Halloran desiring the information, Ousley told him of the old maps of Galway, and promised to bring his friend an exact drawing of it, or an account of the map itself. The map is described as on a very large scale, nearly covering a small room, in which the streets, &c., are marked out; round its margin are placed the arms of the principal families, and on the lots the arms of Ireland, blazoned in the exact order observed in the city, the whole without a name or date, save the initial letter. O'Halloran thinks it must have been struck off soon after the Restoration, because of the references here and there to the different approaches to the city during the Civil War.

The original map referred to was in 1793, and, perhaps, for years afterwards, in the possession of Dominick Jeffery Brown, Esq., of Castle M'Garnat, County Mayo. It would be interesting to know in whose possession is this map at present.

It may not be amiss to add in continuation of the above subject of the arms of Ireland, that O'Halloran explains why he places the provincial arms different from those in the Galway map. As seniority is scrupulously adhered to in heraldry, and for historical reasons, which he gives in detail, he assigns the first place to the arms of Munster, the third place to the arms of Ulster, and the lowest place on the shield to Connaught. The arms of Meath being annexed to monarchy, he would place on an escutcheon as in the Galway map. He was inclined to think that these were only borne by the monarchs, as each province had its particular king; and it justifies, he says, what Cassanæus asserts, that the arms of Ireland was a king enthroned in majesty in a field sable. As supporters, O'Halloran would give these arms a Druid and an ancient knight, to show that the empire was supported by arts and arms—*tam Marte quam Mercurio*. No history, he thinks, bears stronger testimony to these facts. It remains, however, to say something of the arms of Leinster, not mentioned above; and concerning these arms, O'Halloran repeats the account he gave Dr. Burney, through his friend Dr. Quin. The historian says—"In the suite of the first Milesian Prince were a celebrated bard and harper, both in great favour; on the partition of the country, Heber wanted to retain both; this was opposed by his brother Heremon, equal in power. To avoid disputes the choice was to be determined by lot; this fell to Heber, who chose a musician; and as this contest happened in Leinster, to commemorate the event, as well as their love of music, the harp was assumed as the provincial arms." In conclusion, O'Halloran says that the bleeding heart under the arch of an old castle, as the crest of Ireland, alluded to their great hunting matches, which continued many weeks in the seasons with regular encampments. These customs were still kept up in many places in O'Halloran's day, particularly in the Province of Connaught. Many relations of these hunting matches existed at the close of last century; and O'Halloran pointed out that part of the arms of the O'Donoghue of Loch Lene, Killarney (always noted for this sport), are two foxes. From what we have stated above, we think strong proofs are afforded of the antiquity and authenticity of the arms of Ireland.

One Dr. Vasse, in the School of the Faculty of Medicine, at Paris, in the last century, seriously discussed the question "Whether Eating in Company was Conducive to Health," and determined it in the affirmative. He published his subject and his curious illustrations of it. In showing the advantages of eating in company, he fixes three proportions of the meals under consideration, viz., the animal, moral, natural, and physical. The first he shows are such as do good to the body, the second benefit the mind, and the third are useful to both. The

doctor says man is an animal formed by nature for society, is led by examples, and imitates what he sees done. If he observes another eat, he is desirous of doing the same, and his mouth immediately waters. This water is the saliva which dissolves the food, renders it more savoury, and whets the appetite. That being sharpened, we eat with pleasure, and find our meals the better. Where conversation and mirth preside at table, we are obliged to keep the meat longer in our mouths, it is more penetrated with saliva, and digests better. The blood and spirits are in better order, the nutritive juice becomes sweeter, the circulation of the liquids is more completely executed, the heart—the seat of joy—is dilated, and all the functions of the body conspire with a sort of emulation to promote health.

These are some of the advantages of eating in company, as stated by the doctor; but indeed he goes on to state that the advantages accruing are numerous. He says eating in company diverts chagrin and melancholy. The bare sight of many eating and drinking and singing inspires good humour; the healths that pass round, and agreeable conversation rouse the soul, and make it shake off all dismal thoughts. An union of persons either begins or is cemented, and misunderstandings are completely composed or removed. Dr. Vasse goes in for exercise at meals, and explains what he means:—"I will be asked," says he, "what exercise I mean. Is it that of the teeth which communicates electric motion to the frame? To which I answer, it is the motion of the hands and body in carving and helping, in accepting thanks and returning them, in the lively gestures before dinner, and the no less sprightly ones after it." The doctor was fully alive to the evils and abuses that crept in, in his time, to entertainments; but he sensibly says that abuses will insinuate themselves everywhere; so that if all that is perverted should be prohibited, even eating and drinking, and other innocent and useful human acts, would incur the charge of criminality. It appears that the doctor had more than one object in view in delivering his discourse and publishing it. In his day there were several pragmatists, mortified, and penurious licentiates in divinity, who showed a zeal, but not according to knowledge, and who wished to put down entertainments given to their fellow-students when they received the academic honours. The Parliament of Paris, however, by an arrêt, continued the old laudable custom, so good cheer triumphed over the sour moroseness of shallow-minded theologians. The doctor's essay was therefore not written in vain, though all the advantages he pointed out of eating in company may not be obtained. Eating and drinking in company is for certain not an unhealthy practice, and the custom of merry-making is coeval with all history. H.

#### ARCHITECTURAL ASSOCIATION (LONDON).

At a meeting of this Association, held upon the 25th ult. (Mr. S. Flint Clarkson, Vice-President, in the chair), Mr. T. S. Quilter read a very interesting memoir of the late Mr. Edmund Sharpe, M.A. In the course of the sketch Mr. Sharpe's indefatigable labours in the interests of architecture, and his services in connexion with the Association were appreciatively dwelt upon.

A discussion followed, in which the Chairman, Mr. F. C. Penrose, Mr. H. H. Statham, and Mr. Phené Spiers severally took part, each testifying to the services and worth of Mr. Sharpe, and deeply regretting his loss.

A vote of thanks was passed to Mr. Quilter, seconded by Mr. Statham, for his admirable memoir.

Mr. Aston Webb then read a paper on "The Ecclesiastical Architecture of Suffolk."

A brief discussion followed, in which the Chairman and Messrs. Quilter, Phené Spiers, H. H. Statham, and J. Blashill took part.



### ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At the meeting of the Institute, held upon the 11th instant, the discussion upon Mr. J. J. Stevenson's paper, "Architectural Restorations—its Principles and Practice," was resumed. At the meeting held a fortnight previous, the award recently made by the council of an *honorarium* of fifty guineas to Mr. Charles L. Eastlake, secretary, for special services, was confirmed. At this meeting some members were balloted for, and elected as fellows and associates. Among the donations was a portrait of Mr. James Barton, father of Decimus Barton. In making the presentation, Professor Donaldson referred to the enterprise and public spirit of the subject of the portrait, who was the founder of that prosperous seaside resort, St. Leonard's-on-Sea.

The chairman (Mr. Charles Barry) announced that the funds being raised for the improvements of the Institute's premises amounted to £785. £1,000 were required before the recess, so that the council might feel justified in proceeding with the work. The chairman said he was informed by Mr. Phillips, the secretary to the fund, that there were 45 fellows, and 142 associates practising in London, who had not yet replied to the circular appealing for funds; but most of them would, it was hoped, make a response in due time. The chairman next alluded in feeling terms to the loss that the profession of architecture and the Institute had sustained in the death of two of its most esteemed members—Mr. Edmund Sharpe and Sir Matthew Digby Wyatt. The tribute that the chairman paid to their work was supplemented by Sir Gilbert Scott, who also spoke in high terms of both of the deceased gentlemen.

Professor Donaldson then read a brief but interesting memoir of the late Mr. Thomas Bellamy, architect, a number of whose drawings, given by his executor to the Institute, were hung upon the walls.

The paper read by Mr. Stevenson dealt seriously with church restorers in general and particular, Sir Gilbert Scott and Mr. Street coming in for particular criticism for some of their restoration work. A pretty good defence of modern restorers and restorations was made in a discussion that followed on the part of several members, the replies of Mr. Beresford Hope, M.P., Mr. Benjamin Ferrey, Sir Gilbert Scott, being vigorous. The two discussions—that at the first meeting, and that on the 11th inst., are full of interest, and very suggestive. Although Mr. Stevenson made rather an indiscriminate attack on restorers, both in general and particular, it must be allowed he told some truths, for a large amount of pastime and patent vandalism, and bad work has been perpetrated of late years under the name of "Restoration." Judicious preservation and reparation is one thing to be desired; but some of our recent church "restorations" are little short of "obliterations" of once distinctive and well-embodied architectural features.

### TECHNICAL EDUCATION.

A MEETING was held last week in London, in one of the halls of the city guilds or companies, at which a number of the representatives of these bodies were present. The object in view was to initiate a national scheme of technical education. In the opening proceedings the chairman, who was Master of the Mercers' Company, stated that they had been brought together by virtue of a new resolution (passed at a meeting at Drapers' Hall in February last), declaring the expediency of forming a committee from amongst the guilds to practically advance the cause of technical education throughout the country. The resolution had been approved by the companies generally, the Mercers', Drapers', Fishmongers', Goldsmiths', and Clothworkers' having each conditionally promised an annual contribution of £2,000

towards the project, provided, of course, that it took such a shape in its development that they could approve. In addition to this, the Armourers' and Braziers' had offered an annual gift of 500 guineas, and the Plasterers' 50 guineas. The masters of the Vintners' and Ironmongers' informed the meeting that their companies fully concurred in the movement, and were prepared to support it. Resolutions to this effect from the Salters' and the Dyers' Companies were read, as were communications expressing approval and nominating representatives to the general committee, from the Painters', Coopers', Shipwrights', Weavers', Loriners', Spectaclemakers', and Glass-sellers' Companies.

A committee was appointed to prepare a scheme in furtherance of the object of the meeting, and Lord Selborne was appointed the chairman.

In view of the above action it is stated now by the friends of the Corporation and the city guilds that both have set themselves to work in earnest in the cause of technical education. Well, let us trust they have; but certainly they have been a long time about settling themselves to work in any practical manner. We have repeatedly in these pages spoken of the anomalous position of the London city guilds, their mis-directed trusts, and their nominal representation of trade interests. Years and years have been allowed to pass over, and nothing was attempted by these city guilds until the pressure of public opinion was felt and Parliamentary action was anticipated. It is not difficult to guess what sort of a scheme will be developed under the auspices of the Corporation and City Companies, and what particular direction it will take and how it will be managed. The scheme of technical education, if it be a national one, must consequently be a broad and liberal scheme, in which British arts and handicrafts will be fully represented. The means exist, and if the intentions are honest and the work efficiently carried out, a lasting benefit may be conferred upon the country. We have no doubt but a section of the English Press, and organisations which represent handicraft interests in the sister capital, will closely watch the development and outcome of the proposed scheme now being moulded into shape under the auspices of the London Corporation and its feeders, the City Companies.

### WAKEFIELD TOWN HALL.

WITH this number we publish a design for the above, submitted in competition by Mr. W. J. Fennell. The premiums offered by the Corporation were £150, £100, and £50; and the proposed outlay £35,000. This called forth forty competitors, whose designs were submitted for adjudication to Mr. G. E. Street, who awarded the first place to Mr. Collcutt, of London.

### BUILDING SOCIETY REFORM.

BUILDING societies just now are attracting attention, and their management is more closely scanned in consequence of a recent case in the sister capital, in which a member was called upon to pay fines amounting to the enormous sum of £2,939, for not paying up his instalments upon money due, which represented only £1,747. The member very naturally objected to paying such a demand, and the Master of the Rolls, before whom the case came, decided against the society, making very strong (and not uncalled-for under the circumstances) remarks upon the case. The society appealed, and the Appellate Court modified the decision of the Master of the Rolls, still, however, confining the fines to the comparatively small sum of £420 instead of £2,939. Shortly after the decision of the Master of the Rolls,

a conference of gentlemen connected with building societies was held, when it was pointed out that the Birkbeck Society, in making the fines accumulative, was acting on a rule made several years ago. A fixed scale was suggested by some of the speakers, and 5 per cent. was suggested as the maximum, other speakers proposing 10 per cent. The matter was ultimately referred to the Building Societies' Protection Association Committee, to consider and report upon. A resolution was passed at the conference with regard to fines generally, to the effect that whilst fines are necessary, not with reference to the income derived therefrom, but in the interests of borrowers with a view to induce regularity of payments, the time had arrived when the directors of all building societies should see that the rules impose reasonable fines only, and such as could be equitably enforced, keeping in mind the cardinal principle that inasmuch as rents have to be paid punctually, so the monthly instalments should be regularly paid.

The case decided by the Master of the Rolls has certainly had the effect of putting building societies in general under a cloud, and it behoves the directors and managing officials of these societies to take steps at once to reform the system by which they are governed. If the system of fines is not thoroughly revised, and put on an equitable basis, the faith that persons of provident habits placed in these societies will be rudely shaken. We see by a London city contemporary, that a building society there, which was started fourteen years since, and which is stated to be now in a prosperous condition, having a quarter of a million of capital, has felt it necessary to revise their rules, and place the affairs of the society on a better footing. No doubt the society was actuated to do this in consequence of the decision of the Master of the Rolls in the other case. A resolution was moved containing a graduated scale of fines, and providing that in special cases the directors shall have power to reduce fines if they consider it desirable. It was announced also that the directors were anxious to make a reduction in the scale of fines. The reduction proposed was in round figures one-third of the present fines. The secretary of the society in question (The Fourth City Mutual Benefit Society), in entering into the proposed alterations, and explaining the working of the same, stated that the society now ranked as one of the greatest in the city. He was of opinion that they could reduce the fines, not indeed that they had been exorbitant. Public attention had been called to the matter of fines because a certain society had been before the Master of the Rolls. All he would now say upon the question was, that the Master of the Rolls was wrong in certain matters. But as a fact, building societies were for mutual good, and they never wanted to make it well for a large number of members by dealing hardly with the few. But such things were done. In a certain Starr Bowkett Society—and he would not mention the member—a person had deposited £40, and neglected to pay his subscriptions; then he wanted to withdraw, and gave notice to that effect. When he went for his money he was told that his fines amounted to more than the money he had paid in. This was very oppressive. After referring to the late case before the Master of the Rolls, the speaker went on to say that the alterations proposed were put to all parties, and if passed, would be the commencement of a new state of things in connection with the society. Resolutions embodying proposed alterations were then carried, and this society was placed in a better position than previously in respect to its rules. We hope other societies will feel it incumbent upon them, for their own interests and that of their members, to follow suit.

We have already spoken of the shortcomings of some societies in this country, and may shortly return to the subject. In the meantime, as well-wishers to these bodies when properly conducted, we advocate their speedy reform.



N<sup>o</sup> 420 15<sup>th</sup> June 1877.



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NOTES ON THE EARLY HISTORY OF  
THE IRISH STAGE.\*

RETURNING to 1754—Sheridan having given up the management, the two theatres were advertised for some months to be let or sold. Victor, Sheridan's deputy, in conjunction with Sowden, undertook the conduct under their management. According to Hitchcock these gentlemen were tolerably well acquainted with their business. They agreed with Mr. Sheridan for two years certain, paying him £5 for every acting night, and advancing him £2,000 on a mortgage for both houses. The damages that Smock-alley sustained were shortly repaired by Victor, who remained in Dublin while Sowden in the meantime left for London to recruit or engage some fresh performers. Barry, however, appears to have been the principal object of Sheridan's mission, but Barry at this time was becoming conscious of his power and importance. He would only undertake to come to Dublin on being paid £800 salary for himself, and £500 for a Miss Nossitor, a young lady of ability, who was at that time under his protection. As it was necessary to fill Sheridan's place by some representative actor of merit, and a public favourite besides, the managers were necessitated to comply with the terms demanded by Barry. With Mrs. Gregory (who afterwards became Mrs. Fitzhenry) more economical terms were arranged. This lady, who had only a short time previous appeared at Covent Garden Theatre, was engaged for £300, and on the occasion she proved a valuable acquisition to the corps of the Dublin theatres. In their covenant with Barry, we are told the managers luckily stipulated that he should be obliged to perform sixty nights in the season, so that the £800 divided into sixty parts made £14 per night. On the conclusion of the season, though Barry appears to have been remarkably attentive to his interests, nine nights were wanting to complete the sixty; consequently there was a great saving after all to the managers.

On the 7th of October, 1754, Smock-alley Theatre opened under the new management of Sowden and Victor, with the comedy of the "Suspicious Husband." The cast was as follows:—Ranger by Mr. King; Frankley, Dexter; Bellamy, Heaphy; Strickland, Mr. Sowden; Mrs. Strickland, Miss Danvers; Jacintha, Mrs. Cowper (from Drury-lane); and Clarendon, Mrs. Kennedy (from Covent Garden). The opening night was successful, and the play went off well. In addition to the accession of actors and actresses mentioned above, the managers secured the services of Mr. Lacy, who visited Ireland the second time; and Mr. Love, who was a good comedian, from the same theatre. The former opened as "King Lear," and the second made his first appearance in "Sir John Falstaff," and during the remainder of the season acted in a variety of characters with reputation. The acting of Mrs. Gregory was warmly applauded; and she soon became a favourite with the Dublin audiences. Her character of Hermione, in the "Distressed Mother," we are told, was "sustained with an uncommon degree of merit, and on her first night received that just tribute of approbation which constantly attended her performance." Barry also drew a crowded audience on his re-appearance; he had, however, greatly improved during his absence. Miss Nossitor was a young actress; but afforded evidence of her growing abilities. At the close of the year she played Juliet to Barry's Romeo, and King's Mercutio. The play-going citizens seem to have been very well satisfied with the company playing in Dublin at this time; but Barry was the principal attraction, and generally drew crowded houses. The receipts of the theatre at the period were, however, small when compared with what they have amounted to in the present century.

Hitchcock supplies a list of the receipts of twenty-six of Barry's nights during a

round of principal characters, including several of Shakespeare's. Out of the whole twenty-six there were only two nights in which the receipts reached above one hundred pounds; and these nights was when he acted Macbeth. On the 17th of January, 1755, the receipts were £126 10s. 8d. (Irish money), and on the 24th of the same month, when the same play was acted, the sum received was £104 2s. 2d. The lowest receipt was on February 28, when Barry acted Henry V.—the sum received being only £36 18s. 10d. The total amount of Barry's twenty-six nights from January 1st, when he appeared in the play of "Essex" (the Earl of), to March the 12th, when he acted Othello, was £1,813 15s. 2d. In 1755, and long after, the above receipts were considered good and sufficient to be esteemed good houses. The managers were enabled to pay their engagements of £1,600 for the season to three of the then capital performers. The sums paid to Barry, Mrs. Gregory, and Miss Nossitor are small, indeed, compared with that which was afterwards paid in Dublin to Mrs. Siddons, Mrs. Crawford, and others before the close of the eighteenth century; but Dublin during the era of the Irish Parliament, had vastly increased in wealth and population.

Though Sheridan had retired for the time, and the spirit of party had somewhat subsided, still bitter feelings were not wholly allayed. Under the new management of Sowden and Victor, some of the former disturbers who had helped to wreck Sheridan's property evidenced their party feelings by demanding the revival of the unlucky play of "Mahomet." The managers, having a lively recollection of former scenes, did not like altogether to run counter to the demand. For some time they evaded it, but, seeing that there was a growing determination on the part of some at least to create annoyance if their demands were not complied with, the managers promised that the play would be re-produced. They kept their promise, but their anxiety was relieved by seeing that everything passed off quietly, contrary to their expectations. A Mr. Gwinnap, who was selected to act Alcanor, was instructed to yield obedience to the audience if the favourite speech happened to be encored. The speech was encored, as might be expected, and was repeated by the actor; and the rest of the performance passed off without the least disturbance. The house on the night in question did not bring in more than £60.

Speaking of the above event and its surroundings, Hitchcock remarks:—"Ashamed of their defeat, the leaders of opposition laid the whole miscarriage of their designs on the manner in which the parts were performed, not having the name of Barry or Mrs. Gregory to support them, and as their last effort requested that it might be given out once more. This was complied with, when, to their utter mortification, so few came to the house that it was obliged to be dismissed. Thus ended an affair which in the beginning had been productive of so much mischief; and such difference does, even a few years after, make in the minds and actions of an audience."

It is well indeed for the respectability of the stage that no such dictation is possible in these days, and that both audience and actors are prohibited, and the former are ready and willing to put down wanton disturbers in their midst, who would annoy and insult either actors or hearers. To Sheridan, however, honour is due for his first manly stand to reform the Irish Stage. He suffered for his courage, but his sufferings resulted in public good that should be remembered to his honour. Audiences still betimes evidence impatience, if their demands are not complied with. They must have their favourite parts or songs repeated, careless or indifferent of what a tax, inconvenience, and even pain it may entail on the part of actors or managers. The encore system has become an abuse, and except under special and exceptional circumstances it is not defensible, and should be abolished. Bad or indifferent

actors and actresses at present are often as much encored by their friends as good performers; but an encore, no matter how loudly or persistently it may be shouted, is no proof of the merits of a performer or his performance.

At the close of the season on the 9th of June, Barry and Miss Nossitor left for London. The new managers had no cause to complain as to the results, but they were obliged to look about immediately to supply the places of the performers who took their departure. The services of Mossop were next enlisted, the managers feeling their way with anxiety, and unwilling to risk the heavy engagements of the previous winter. They agreed to give Mossop a third of the profits, the nightly expense being calculated at forty pounds, the overplus to be shared equally between the three. It appears that in their agreement with Mossop, they omitted a material matter, which was the obliging him to perform a certain number of nights. Mossop drew a good deal of money, but he found that playing once a week would excite curiosity more than if he acted a number of times; he naturally availed himself of it, and consequently at the close of the season he had only performed twenty-four nights. This action of Mossop in the end entailed a loss on the part of the managers, for Mrs. Gregory, who had her salary advanced to £400, had no opportunity of studying more than a few of Mossop's tragedies. She seldom appeared in comedy, so at the close of the engagement the managers found themselves a good deal out of pocket. On the other hand, the emoluments of Mossop, including his benefits, were large, and amounted to between £800 and £900.

In addition to the performers above-mentioned, the new managers, a number of new performers, and new pieces were brought forward by them. Among these was Mr. Stamper, a comedian, who appeared in the character of the "Miser," and who throughout his performances gave general satisfaction. Stamper acquitted himself creditably as Scrub, Foresight, and in sundry other characters. A young actor of the name of Kirkpatrick played Romeo, and afterwards Altamont, Essex, &c., and a Mrs. Glen, of the Covent Garden Theatre, came out as Juliet.

About this time Dr. Arne, the composer, made his appearance in Dublin, and Victor and Sowden's company at Smock-alley was reinforced by the addition of a strong musical contingent. Arne had then under his direction an excellent company of vocal performers engaged for the representation of some operas by subscription, for ten nights each. This affair turned out a great relief to the business of the theatre, as the operas filled up the vacant nights—answering, at the same time, Dr. Arne's purpose, he having obtained a large subscription. These operas were patronised by the Lord Lieutenant, the Marquis of Hartington (afterwards Duke of Devonshire), and by a large number of the nobility. We read that these operas were in general well supported by Mr. Sadler, Mr. Arne, Miss Brent, and Miss Polly Young, "a child possessed of an uncommon fine voice and manner." Miss Brent was very young at this time, but we are told she gave assurance of her future fame. At the close of the season she studied for the first time the part of Poll, in the "Beggars' Opera," a character in which she afterwards drew crowded houses in London.

Mossop and Mrs. Gregory were the principal performers on which reliance was placed by the managers, and pieces were selected to show them off with advantage. Mossop appeared in his favourite Zanga, and anon as Richard, Pierre, Horatio, &c. The tragedy of Barbarossa, written by Dr. Browne, which was brought out at Drury-lane Theatre in 1755 by Garrick, was announced, considerable pains being bestowed by the Dublin managers in getting it up. It was performed here for the first time on February 2nd, 1756, and received with applause, Mrs. Gregory's performance of Zaphira adding greatly to her

\* See ante.



reputation, it being her original character. The part of Achmet was acted by Mossop, and though unsuited to him, he came through it with flying colours. The play was often repeated to crowded houses. Mossop and Mrs. Gregory acted with great effect, as they did also in "Coriolanus," which was revived at this time.

During the remainder of the season there was nothing very noteworthy save two pieces that were brought out by the celebrated Henry Brooke, of whom we have already given some particulars. The first was a revival of Jack the Giant Killer, which with difficulty reached a third performance. The second piece was the tragedy of "Injured Honor," which was well received, bringing crowded houses and the attendance of the Lord Lieutenant on the author's night. The remainder of the management of the Dublin theatre under Victor and Sowden is shortly told including the incidents of their last season.

## LECTURES ON ARCHITECTURE.\*

(Continued from page 162.)

### DOMESTIC ARCHITECTURE, FOURTEENTH CENTURY.

My last lecture brought down our review of English Domestic architecture to the close of the thirteenth century, a time when architecture in general was in a flourishing state in this country. Much of this prosperity was due to the personal influence of King Henry III., who did his best to induce foreign artists to settle in England, and who showed, by every means in his power, his anxiety for the advancement of art. To him succeeded the Edwards; and we will now briefly consider some of the architectural peculiarities of their time.

Referring to the older fashioned nomenclature of the periods of Gothic architecture, the period now under consideration is that which has been called the Decorated, and followed the Early English, which has already been discussed. It is not my wish to enter now into the many peculiarities of transitional work, and the numerous changes which gradually arose, causing each period to melt, so to speak, into its successor. I shall, however, attempt to point out some of the more obvious changes of detail, for the benefit of those students who have not investigated such questions as architects.

We are now approaching the more prosperous times of English history. Normans and Saxons had grown up together, and had intermarried with each other, and with the former inhabitants of the soil. Society was becoming gradually wedded together, under the influence of a common faith and a powerful religious caste. Peace and prosperity are necessary for the construction of important works of architecture; without peace, there is no security to induce men to undertake difficult and lengthened operations; without prosperity there is a want of means to carry such works to a conclusion, as, unfortunately for architects, they cannot exercise their art without paymasters. The reign of the first Edward combined these requisites, though they were not as fully secured by his successors. Trade flourished, and wealth multiplied itself. London and the large towns gained in importance, and the communications with the Continent were increased and simplified; while some of the fairest portions of Northern France were among the happiest of the English king's dominions.

We have seen already that in England the arrangements of our domestic architecture were not very far advanced. In these things the French had the advantage, and the connexion between the two countries was not therefore without a considerable influence on the gradual enlargement of English ideas of civilisation and comfort. The manor-houses of the country gentry became more elaborate

as new wants began to make themselves felt. The architectural details were multiplied, both in design and decoration. The hall asserted itself more and more as an architectural feature, and domestic offices were provided on a scale hitherto unthought of. Many of these changes were much assisted by French influence, as the great lords from France, who came to attend the English court, brought with them a numerous train of servants and dependants, accustomed to the handsome houses and good beds of their own land.

Until this period we have had to trace the advance of architecture, as regards public buildings, mainly in its ecclesiastical aspect. The bishops and monks were the chief patrons of architecture, and their comparative security and wealth had enabled them to indulge their tastes at a time when the rest of mankind had mainly to consider how to protect themselves from violence, cold, and hunger. The fourteenth century, however, is marked by progress in domestic, as well as in ecclesiastical buildings. Window-tracery, introduced in the preceding century, was heartily adopted, and pushed to a development. Numbers of lights were grouped together under a single arch, and the latter became filled with patterns of more or less intricacy. At first such patterns were made up of circles, triangles, and the like, so that the style has been called Geometrical. In other cases the whole space is occupied by irregular shapes, growing out of each other, or from a parent stem, a peculiarity which is known as the flowing, or Flamboyant style.

Many other changes arose, to which I shall have occasion to allude hereafter. They were all in the direction of greater freedom of design and ingenuity of construction. Among the more important houses of the time are the bishops' palaces. The bishop was not only an ecclesiastical, but also a secular prince, and his residence was accordingly on a large scale. Such remains as those at Wells, Norwich, and Lincoln, suffice to enable us to appreciate the state which was kept up by the bishops. Nor were the nobility behindhand. At Penshurst we find a structure of almost royal magnificence, partly, indeed, belonging to later times, but the most important portion of which, the hall, was erected in the Edwardian era.

It was at this period that English country-houses multiplied, and domestic wants began to be carefully considered. It was otherwise in France, where the best examples of the architecture of the day must be looked for in towns. This has been accounted for by the more disturbed state of the country districts of France, as compared with England, at the moment. France, moreover, from its geographical position, was more accessible to the influence which Rome and Italian civilisation brought to bear on art. England was a far-off land,—an island separated from other countries by stormy seas, and not readily approached, either in peace or war. The difference in the architecture of the two countries was strongly marked; and in one, we may turn our attention chiefly to the towns, and in the other, to the country, in respect of our present inquiry.

Apart, however, altogether from questions of public affairs, the divergence of customs may, I think, be referred to a cause lying deeper in national tendencies. In England, these tendencies have always pointed to country life and its pursuits. In France, the great towns have been looked upon as the central rallying points of society. The latter have, therefore, received the fostering care of governments and individuals, and have called upon art, and especially architecture, to lavish its resources for their adornment.

In England the case has been different. Many of our large towns have suddenly arisen because coal and iron were found near to them, and they were needed, as centres of manufacturing industry. London, as the capital, might have been expected to have occupied a different position, and it has doubtless done so to some extent. But the taste for field sports and a country life, and

the care of great estates, have always induced the English aristocracy to give the capital a smaller share of their affections than they accord to their stately provincial homes; and even now it is difficult to arouse in them any enthusiasm for metropolitan improvements. London, with natural advantages almost unrivalled, has, until lately, been the ugliest of modern capitals, and though much has been recently done for its improvement, there is still a grand field for the reformer.

In the fourteenth century town houses were still constructed, as a rule, of wood, and they have consequently perished by fire or decay. In the country, stone was more readily accessible, and great buildings were erected near to the stone quarries. Of course there were many wooden buildings also in the country, and some of these remain to us; but the majority have passed away, and we shall find our inquiries much restricted, in consequence, to buildings of masonry. These were built in a solid manner, with walls from 3 ft. to 4 ft. thick, with buttresses and turrets. The roofs were of high pitch, having substantial and ample timbers. They were occasionally covered with wooden shingles or thatch, but the more permanent protection of slate, stone, or tiles, was now ordinarily adopted.

As regards the general plan, we find the great hall still supreme. This feature had been handed down from generation to generation from the days of the Romans, whose Atrium, covered to suit the climate, had set the fashion to their successors. The successive improvements in architecture had added to the importance of the hall. At first, narrow; and when wide, divided by columns; it now became a spacious and lofty apartment, the whole height of the building, as at Penshurst. Wings were thrown out from it, for the accommodation of the family, and towers were added for protection, and also for grandeur and architectural effect. Minor offices and stables were grouped around it, and at the sides; and a gatehouse placed opposite, so that the whole group of buildings formed a quadrangle, of more or less regularity, in which the chapel was not forgotten.

Protection was afforded by enclosing walls and turrets, and in some instances by moats. At Penshurst the enclosure was large, to afford space for the retainers and guests of the owner, and there was a wall with a moat outside. At Ightham, at Hever Castle in Kent, at Helmingham in Suffolk, and in other places, the moat closely surrounds the house, washes its walls, and is spanned by bridges to the principal entrance.

A tower, attached to Mediaeval houses, was a mark of rank, and this feature was sometimes built separate, and of greater strength than the rest of the building. The towers may have been used as places of refuge, or depositories for valuable goods and records, in case of sudden tumult. In the northern districts, towards Scotland, which were exposed to the frequent raids of turbulent neighbours, the towers were of greater importance, and even gave the name to the whole structure. The tower, which in the Border counties was called the Pele tower, was, in fact, the rallying point of the district in case of need, and the inhabitants could shut themselves up in it, for a time, until any pressing danger were past. In such places the idea of a tower gave a great feeling of security, and there are good examples of houses, built of several stories in height, forming a tower with flanking turrets, and protected by a moat at the foot of the walls. One of them is to be seen in the case of Dacre Castle, in Cumberland.

With certain varieties, due to local causes, the gentlemen's houses of this period followed a general custom in their arrangement. We find, as the usual type, the hall and enclosure, with kitchen and other offices in it, mostly built of wood; a cellar, or chamber, under the hall, and a solar, or bed-chamber, on an upper floor, for the family. Sometimes a dungeon is added, with a guard-room for soldiers, and further rooms, to a greater

\* By Professor Barry. Fourth lecture. Delivered at the Royal Academy on Thursday, March 15th.



or less degree, in accordance with the importance of the owner of the building. In unsettled districts the ground-floor is massive, and little pierced with windows, and when the latter exist they are often mere loopholes. Stone staircases were introduced, with newels, and windows and fireplaces were common in all private rooms. External stairs, which formed the principal means of approach in the Norman castles, were not suited to the more domestic style now becoming common, and were gradually laid aside in favour of internal staircases. The principal doorways, in cases where the house was surrounded by a moat, was approached by a drawbridge, and defended by a portcullis, much as we see at the present time in fortified towns abroad.

Protection from casual external violence was still a question of great importance, but the advance of civilisation was, by degrees, bringing into greater prominence the more settled and domestic influences of family life, and these soon acted powerfully on the architecture of the day. In towns, the houses did not need to be castles. The walls, ditches, gates, and battlements, surrounding each important city, enabled the citizens to erect their houses, and carry on their business, in a feeling of security. Their buildings were consequently made, as we have already seen, of more flimsy materials than the country houses of the gentry, and, as a consequence, our knowledge of them is less. In some of the old towns of France, however, we find very interesting remains of timber houses, and those which are still left in England, even if they were mostly erected at a later date, are obviously built after the ancient manner.

In most cases there was a high-pitched gable to the street, with stories projecting, one over another. The gables were often ornamented with carved or traceried bargeboards. The chimneys in town houses were commonly built in inside walls, and terminated in cylindrical shafts. The windows were protected at night by external shutters, which were often hinged to the transom of the window, so as to admit of being pushed open from the bottom, and thus serving to protect the opening from sun or rain in the day time. At the time we are considering coal was largely introduced into our towns, and became the ordinary fuel of the citizens, although at first, much objected to by them on the score of the dirt and disfigurement of the buildings which it caused. With them, however, as with us, the advantages and convenience of coal outweighed these objections, and it soon became an important article of commerce, and of daily domestic use.

External painting was adopted as a means of preserving cleanliness, and the Flemish habit of decorating their houses with bright colours was partially used in England. It has been already noticed that in the time of Henry III. polychromy of an elaborate character was practised, and we may therefore conclude that the houses of the great in the fourteenth century were ornamented in a similar manner. Looking at the general character of the latter, we shall find that there had been a general advance in comfort and refinement, although in these matters our ancestors were still far in arrear of any notions of the present day. The rich were beginning to gain from the experience of others, but the poor were still much as before, with rude and simple accommodation in their dwellings.

The feasting in the hall was marked by a coarse profusion, and the apartment was frequently used as a dormitory, as well as a dining-hall. The fire was still in the middle of the room, and a louvre in the roof over it formed its chimney. The furniture consisted of the necessary tables and benches, and any addition to these was for the high table only, placed on its dais of one or two steps. From the upper end of the hall the lord and his party could withdraw into his private chamber, or solar, which sometimes overlooked the hall by means of a small window. A

music gallery was occasionally found, generally placed over the entrance corridor.

We have fortunately so many Mediæval halls remaining in this country that we experience no difficulty in understanding these arrangements, most of which have continued unaltered to the present day, and as the custom of dining in hall was tenaciously upheld, there is little difference between buildings of various dates, excepting as to the actual details of their architecture. Thus, we have in London a fine example of a hall at the Middle Temple, which, though of later date, is consistent in its plan and general design with all that we know of the halls of the fourteenth century. At Oxford and Cambridge, also, there are numerous and striking specimens of this important portion of a mediæval house.

The roofs were usually of timber, cleverly constructed, and sometimes richly decorated with carving, and also painted and gilded. In some rare cases stone arches were adopted instead of wooden trusses. This is the case at Mayfield, in Sussex, then a country seat of the Archbishop of Canterbury, and there is a similar feature at Ightham Moat, Kent, before referred to. An arch of solid timber was also a favourite expedient, and this sometimes sprang from columns, as at Nursted Court, Kent. In other examples the walls were connected with tie-beams, which prevented the arched principals from thrusting out the walls. At Nursted this object is ingeniously attained by the horizontal beams, which extend from the walls to the feet of the arched principals, upon the capital of the columns. We may see in this arrangement the germ of the idea which was afterwards to expand into the daring designs of hammer-beam trusses, as in the present roof of Westminster Hall.

At Mayfield the hall was large, and handsome in its architectural features, as befitted the palace of an archbishop, given to hospitality, according to the custom and traditions of his high office. The dimensions were about 70 ft. in length, and 40 ft. in width, and there were numerous rooms in connexion with the hall, which have now fallen into decay. The exterior shows strong buttresses, which were necessary to resist the thrust of the arches of the roof. These arches are of stone, springing from carved corbels, and are themselves handsomely moulded. They are, of course, pointed in form, as at the time of their erection the semicircular arch was no longer used. There are no remains of the timber roof which connected the arches and covered in the hall. It was probably boarded internally, and enriched by coloured decoration.

The Mayfield Hall may serve to give some notion of the style of the great houses of the time. Its details, whether of windows, doorways, or other features, are all of considerable beauty, and serve to indicate the importance of the primates, Mayfield being one of their favourite residences. The whole property was seized by Henry VIII. at the time of the Reformation, since which period, it has been altogether alienated from the see of Canterbury.

We may notice in the halls of this period a change which has taken place in the windows, enlarging their usefulness, and increasing their architectural effect. Tracery having been by this time heartily adopted by the architects of the day, naturally found a place in domestic, as well as in church architecture. As the halls gained in height the windows were naturally lengthened, and the plain lancet openings increased in size and height. The next step was, therefore, to divide them, not only vertically, but also horizontally. The two-light window remained as before, the ordinary type in domestic work; but the massive central jamb and column disappeared, and were replaced by a mullion of moderate dimensions of section. The height, which would otherwise have been inconvenient, was bisected by a transom, with tracery; and the form of window, thus created, became common in the architecture of the day. The inner jambs and mullions were decorated with

attached columns and mouldings, in a variety of ways, and the general design, as described, was so commonly adhered to, that we expect to find it, almost as a matter of course, in the secular buildings of this period. It may be repeated here that in such cases the inner cill which, in modern language, is called the window back, was not sloped as we see it in our cathedrals and churches, but was worked flat, so as to serve for a seat.

Glazing was still expensive and rare, and it was often applied in movable casements, which appear to have been capable of removal, so that their places might be occupied by wooden shutters, when the lord and his family were absent. As stained glass was now in constant use in the churches, we may suppose that it was not unknown in other buildings, but it must have been sparingly used, and there is little to guide us on this subject. Shutters were still common, both for security and for keeping out the cold, the latter being, we may be sure, no unimportant consideration in lofty halls, such as Penshurst and Mayfield. The fire in the middle of the room was often the only effectual means of warming, and for this reason, doubtless, it continued to be placed in the centre of the greater halls, long after chimneys and hearths were constructed in the walls of the private apartments.

Greater comfort was sought by the introduction of wooden panelling on the side walls, and above the wood-work there was ample scope for the art of the painter, who was busy now, as we have seen was the case in the preceding century.

Wall painting, however, soon encountered a powerful rival in the introduction of tapestry. This was due probably, in the first place, to foreign influence, as may be inferred indeed from the name of Arras. At first of great cost, tapestry was used only for places of special importance, as for the hangings to the king's throne; or the back of the dais in the halls of the nobles. In churches such hangings had long been familiar. After a time, as the demand increased, the tapestries required were made in this country, although importation from abroad still continued, particularly in the case of the rarer and more costly stuffs. London and Norwich were the chief seats in England of this manufacture, but it was also carried on in other towns. The tapestries were embroidered with numerous devices, with figures, and representations of animals, such as leopards, eagles, griffins, and the like. The material was usually worsted, although richer stuffs were adopted on great occasions, and silk and velvet were not uncommon, particularly in France.

One reason why tapestries became popular, was that they could be easily removed. A great personage, when travelling in those days, took with him the greater part of his goods and furniture. Beds were, as a matter of course, carried in his train, and by taking with him the tapestries which covered the walls of the rooms, much was added to the comfort of the traveller at the various resting-places on the road. Froissart says that the houses of the period were "hung with tapestries, representing various scenes and histories, to the delight of all beholders." This must have applied, at least in England, chiefly to the private chambers and bedrooms.

The halls were more commonly wainscoted with panelling, which in later times extended frequently to the ceiling. Against this panelling the benches were placed, when not in use at table, and from this custom arose hereafter the common practice of constructing fixed benches against the walls, as a part of the dado or wainscot. The benches served as couches at night, in cases when the hall was still used as a dormitory, and the early habits of our ancestors favoured this arrangement. The dinner was early, being served before midday, and there was a supper before five o'clock. These two repasts were the principal meals of the day, and it is curious to note that they accord with the practice of our French neighbours, at the present time.



The dinner was often an occasion for state and pageantry, and in such cases it was protracted until a late hour, and was accompanied by music, followed by revels, masking, and minstrelsy.

In important halls there is commonly a recess, or bay window, near to the high table, where the plate could be displayed. The skill of the Mediæval goldsmiths was great, and the principal noblemen delighted to possess rare and beautiful objects in the precious metals. These precious things they carried about with them from place to place, not caring probably, by leaving them at home, to put too much temptation in the way of the roving bands, which still infested many of the districts, in which their country seats were situated.

Plate was for ornament chiefly, as only the very rich could use it habitually. Powder and wooden platters and drinking-horns were the utensils commonly seen on the dining-tables. The great salt-cellar was, however, always a conspicuous object, and the position of a guest, in relation to it, determined his precedence, and the favour he enjoyed with the lord of the feast. Great ingenuity and variety were introduced into the design of this important item of the furniture of the table. The older forms were generally those of massive cups, but these were succeeded by more fantastic shapes of animals, buildings, and the like. Another peculiar vessel was the ship, which contained spices and sweetmeats, the form of which may have been intended to suggest the foreign origin of many of these delicacies. The design of these ships was followed in later days, by the makers of porcelain, and some of their works modelled on the old design have been highly esteemed by collectors in modern times.

(To be continued.)

#### RECOGNITION OF SANITARY REFORMERS.

ON Wednesday last a meeting was held at the rooms of the Social Science Association, presided over by Mr. Lowe, M.P., to receive the report of the committee appointed to provide for a testimonial to Mr. John Simon, C.B., late Medical Officer to the Privy Council, in recognition of his long and arduous services to the State. The testimonial will take the form of a bust, to be placed in the Royal College of Surgeons.

Mr. Lowe in the course of his observations said that Mr. Simon had sacrificed a distinguished professional career to undertake a work for his country, in which he had to fight an up-hill game, and which could hardly be said to have ended happily. He referred to the attempt to found a scientific department to watch over the public health. Although this scheme had suffered a temporary eclipse, he felt certain posterity would recognise the great value of Mr. Simon's services.

We may add here that Mr. Simon was born in 1810, elected Fellow of the Royal College of Surgeons in 1844, and besides being Medical Officer of the Privy Council, held the appointment of Surgeon to St. Thomas's Hospital, and lecturer in pathology. Mr. Simon is author of several papers on the sanitary condition of England.

It has taken long years to pioneer sanitary reform, and many more to accomplish instalments of this reform, and during these years, half a lifetime and more, the Government of these islands have been slow in recognising the claims of some of the hardest workers, and who are working still.

Mr. Edwin Chadwick, C.B., like Mr. Simon, devoted many years of his life to the question of the public health. He is senior to the former, for his life began with the opening of the century; and as far back as 1830, he was called to the bar. As an English social economist, Mr. Chadwick has done useful work. He remembers the first modern efforts made in a sanitary direction by public action and parliamentary legislation—the acts of 1845 and 1848. He was Commissioner of the General Board of Health, which was

constituted in pursuance of the act of the last named year. Since that time Mr. Chadwick has been mixed up in the question of public health more or less, and is the author of several papers on sanitary matters and public education.

In penning these few remarks the name of Mr. George Godwin, as one of the men of our time, occurs to our mind. Though several years younger than either of the above, still for the last thirty years his pen and voice have been unceasingly devoted to the advocacy of sanitary reform.

As a professional architect, and performing cognate duties, Mr. Godwin had many facilities of making himself a complete master of the public health question in all its bearings; for the homes of the people are the nurseries of our future men. The journal he has successfully conducted for upwards of a quarter of a century has, without the least doubt, acted as a great pioneer; and it is only strict justice to say, the *Builder* has been mainly instrumental in the leading to, yea, even in the accomplishment of, several important sanitary reforms legislatively and also in their practical embodiment. Mr. Godwin's papers and essays are numerous on the questions of health and education, and his published works in book form are not a few. He is still a living and active sanitary worker and reformer, and, without misgiving, we can endorse what has been written of him and his services many years since by one who appreciated his labours:—"We step out of our way to praise Mr. Godwin. We do so deliberately. We think it right now, while our true-hearted brother is doing well his chosen task, to tell him, from our heart, that there are many who, without even a knowledge of his person, honour him for his good intent and useful action. Better than thus reserve our praise for set occasions of 'silver' testimonial or for empty words to 'soothe the dull cold ear of death.'"

If ever a man deserved honour and recognition by the Government or the people of Great Britain for his life-long sanitary labours, that man is George Godwin.

#### DUBLIN SANITARY ASSOCIATION.

##### FIFTH ANNUAL MEETING.

We have had on a former occasion to complain of a lack of courtesy—shall we say neglect or carelessness?—on the part of the officials of the above association, in withholding from us (the only Sanitary Journal in this country) the usual Press favours and notices of meetings. For the non-appearance of a report of the fifth annual meeting, held last night in the Leinster Hall, the blame cannot rest on our shoulders. In one or two other quarters the same complaint exists, of which we hope we shall not be obliged to say something hereafter.

##### ROOM VENTILATION.\*

Most persons admit that rooms should be ventilated, and yet in practice room-ventilation is neglected. There are a door, a window, and a fire place to most rooms, but no special means to change the air at the level of the ceiling. Hence the oppressive condition of the internal atmosphere of a sitting-room or a bed-room after occupation. It has over and over again been asserted that burning gas in rooms injures books, pictures, and furniture. A recent inquiry into this question has, however, shown that it is the excess of heat caused by want of ventilation, and not necessarily the burning of gas, which has caused the injury. The temperature in a room of 12 ft. vertical height will frequently vary 20°; that is, will be 60° at 5 ft. from the floor and 80° at the ceiling—and in many instances, on special occasions, the ceiling temperature will rise to 100°. Libraries have been examined both in America and in England to ascertain the cause of

rapid decay in the buildings, both where gas has been in use and where not, but where the ceiling temperature has been high for want of ventilation, and in both cases the injury is reported to have been due to the high temperature and baking effects of the heat rather than to the gas or to any of its products, as sulphur.

We shall some day arrive at the conviction that every room, public or private, must have means to change the air at the highest points of room, water-closet, or staircase, without causing a direct draft; and if proper openings are provided, protected, and attended to, there will be less of injury to books, pictures, and furniture, as also fewer headaches.

The question may be asked,—How shall the ventilation be effected? Well, this will depend upon local specialities and fancies. There are Sherringham's, Tobin's, and Watson's, as also many other modes, patented and not. For bed-rooms an opening from the room to the corridor outside, protected by perforated zinc, will answer, and at the top of a staircase there may be means for permanent ventilation round the skylight, or an opening through the coiling. For cloak-rooms, water-closets, and at the top of staircases, there may be fixed openings which cannot be closed. The writer and some of his personal friends in town and country have had such openings, winter and summer, for more than twenty years, direct to the open air, with nothing but permanent benefit. The inlet is so arranged as not to permit of a direct draught which shall inconvenience. Colds arise and are the result not so much from temperature as from injudicious and underclothing,—thin shoes, bare necks, and light dress,—when special protection to secure bodily warmth is required: low temperature in a bed-room better fits healthy people to endure low temperature out of doors. Ventilation, if a direct draught is avoided, seldom gives cold, and when it does underclothing is to blame,—a warm shawl would have been a safe protection. Our dwelling-house construction is too air-tight; plaster and paint make the top of a room an inverted hot-air receiver.

#### ARTISANS' INSTITUTE (LONDON).

AT the annual meeting of this body, which was held at the rooms of the Society of Arts, the Earl of Rosberry in the chair, the Principal of the Institute, the Rev. H. Solly, read the annual report. It described in detail the nature and value of the work done during the past year, and mentioned that, taking the total number of students last session at 100, there was an increase in their present numbers of 93, the total number, including those in the bricklayers' class, now being 193. Of these, several attended more than one class, so that the number actually enrolled in the class register books exceeded 278. Acknowledgment was made of increased support from the City guilds, including a gift of 100 guineas from the Clothworkers' Company; and referring to the proposed scheme of some of the guilds for establishing a technical university with affiliated schools, the report stated that, should that scheme be carried out in all its noble proportions, it would constitute a memorable era—alike in the history of the working classes of this country, in the promotion of all skilled industry, and in the records of the ancient guilds of London, while it would lift the Artisans' Institute on to a permanent basis of assured and ample maintenance. The Hon. L. Stanley moved a resolution congratulating the trustees and subscribers to the Institute on its increasing usefulness and success, and expressing a hope that more liberal support might be accorded to it by the friends of adult education.

The Caxton Exhibition will be opened on the 30th inst. by Mr. Gladstone, who will deliver an address, which will afterwards be printed in old Caxton type. Her Majesty has lent a book—the *Mentz Psalter*—valued at £3,000. This is said to be the first printed book bearing a date—1457.

\* From the *Builder*.



## NEWRY AND ITS SANITARY CONDITION.

DURING some "lucid intervals" in the weather last week we took a stroll through this "frontier town" of the North. It was particularly gratifying to note that the Town Commissioners and their officers had been attending to the duties entrusted to them by the ratepayers, *i.e.*, looking after the sanitary condition of the town and its inhabitants. In its very exhaustive report of the meeting of the Town Commissioners on Monday, the local *Telegraph* prints the report presented by the sanitary sub-officers. It embraces the work done by them in April and May—*viz.*, 1,456 houses, yards, cellars, &c., examined. Of these 879 were found clean, and in a satisfactory condition. In 46 instances where improvements were required, the owners were noticed to have them made forthwith. 468 notices were served on owners and occupiers to whitewash their houses, yards, and pig-styes. "We (say the officers) are satisfied that the work of inspection carried out during the past two months has improved the sanitary condition of the town very much, and it is also due to the occupiers to say that they evinced a willingness to carry out the order of the Town Commissioners."

## RATHMINES AND PEMBROKE TOWNSHIPS.

THE Rathmines and Pembroke Townships Improvement Bill came before a Committee of the House of Commons on Thursday—Mr. R. Bright in the chair. Sir E. Beckett, Q.C., Mr. Pembroke Stephen, Mr. Fitzgerald, and Mr. O'Hara appeared for the promoters of the bill; and Mr. White for the Dublin, Wicklow, and Wexford Railway.

Sir E. Beckett, Q.C., in opening the case for the promoters, stated that the chief object of the bill was to authorise the construction of a Board of Outfall Commissioners for the townships of Pembroke and Rathmines, and to relieve them from the operation of the Main Drainage (Dublin) Act of 1871. In the House of Lords the Corporation and the Port and Dock Board of Dublin opposed this bill, but they were now satisfied with its provisions, and did not appear against it. To-day the only opponent of the bill was the Dublin, Wicklow, and Wexford Railway, and the object of the Company was to obtain an alteration in the mode of rating. There were at present bodies of Commissioners in the townships of Pembroke and Rathmines, and it was proposed to constitute them the body to carry out the Act. It was estimated that the cost of constructing an outfall sewer would be £60,000, which was less than the contribution of these towns would have been under the Dublin Main Drainage scheme. The position of the Dublin and Wexford Railway Bill was directed chiefly to the question of rating, and they wanted, in fact, to be rated at one-fourth of the rate imposed on the other owners of property. They alleged that the drainage scheme was of no benefit to the railway. It was, no doubt, true that the railway would derive no benefit from improved drainage, but it would be a great benefit to the passengers who travelled by the railway. In 1875 the railway company had an omnibus bill in Parliament, and they attempted by a clause in that bill to get rid of the three-fourths rate in all the townships through which they passed. He was the counsel for that bill, and the proposal, as stated in his brief, looked a very fair one, but the House of Lords, without ever hearing the case for the opponents, rejected the clause. They had, therefore, failed to get this reduction.

Sir John Hawkshaw was examined and said that he had examined the plan of Mr. Hassard. He considered it the best method for dealing with the drainage of these two districts.

Mr. Richard Hassard, C.E., explained the features of the scheme which he proposed for the drainage of these townships. It was proposed to construct an outfall sewer, which would be discharged in the tidal estuary.

In cross examination, Mr. Hassard was asked if he knew on what terms the Corporation of Dublin had agreed to withdraw their opposition to the bill, but the question was objected to on the part of the promoters, and, after discussion, disallowed.

The other witnesses examined were—Dr. Wright, a Commissioner of Pembroke and a Professor of Botany at Trinity College; Mr. F. Stokes, Chairman of the Rathmines and Rathgar Township; Mr. Greene, Commissioner of Valuation.

Mr. Whyte addressed the committee for the railway company, contending that they were not seek-

ing to gain any exceptional advantage, but only asking for that which was perfectly usual.

The committee, at the close of the case, decided to pass the preamble of the bill, at the same time giving the railway company one-fourth the rating they asked for. The clauses of the bill were then considered in detail, and powers were given in it to protect the company's line during the progress of the works. The bill finally passed through committee, and was ordered to be reported to the House.

## CORRESPONDENCE.

## TAXING MASTERS, AND ARCHITECTS' FEES.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—The prevailing anomalous position in which architects and civil engineers, whose claims for remuneration on trials are submitted to a taxing master, are placed, demands, I would suggest, your strenuous exposition, inasmuch as the right of such to be regarded as *professional* men is completely ignored by those legal functionaries. This I have unfortunately experienced on numerous occasions, when my bills were sent in to be included in the attorney's costs, and were sent down to one-fifth or one-sixth of the charges made in strict accordance with the acknowledged professional scale. But happening recently to be present in the master's office when an account of mine (amount £21—*viz.*, £5 5s. for survey and drawings of premises in question, and the balance for time attending court, counsel, and attorney respectively) was presented, the master only allowed (and that after much remonstrance) £2 2s. for the drawings, and nothing at all for five days' attendances, on the ground that an architect was not "a professional man" in the same ratio as an attorney or a doctor, and, in fact, only one of the general public who should attend in obedience to a subpoena. Now, sir, I submit that such a statement is perfectly illogical, when the merits of a question between conflicting parties in matters of trespass, dilapidations, &c., can only be decided through the medium of skilled evidence, and the laborious production of drawings and models, and the tuition by architects ("experts" as they are often termed) to both attorney and counsel, who, until receipt of same, are generally in blissful ignorance as to the data on which to establish or defend a claim. True, it may be reasonably advanced, that the client who employs the architect has the right to pay; but it not unfrequently happens that an action will unpremeditatedly crop up respecting premises with which the architect, having been previously associated in some manner, ultimately finds himself honoured with a "Grace of God" and a viaticum. And, there also appears to be a pretty extensively circulated fallacy that the master must be right as regards the legality of architects' charges, and that aught else beyond his valuation must be extortion. It seems, likewise, immensely difficult, if, indeed, at all practicable, for an architect to succeed to the full extent of his claims for fees in any of the courts; for the "custom of the profession," no matter how conclusively proved, is generally disregarded to a greater or lesser extent, whereas the "custom of the trade" in the case of the artisan is usually religiously maintained. Many in the profession have, like myself, doubtless experienced the above enumerated facts; and although, in some instances, clients will be both able and willing to remunerate properly, I doubt if I exaggerate when I say, that such "instances" are more the exception than the rule.

JOHN J. LYONS, Architect, &c.

201 Great Brunswick-street.

## HOME AND FOREIGN NOTES.

Mr. James Pile has been declared the contractor for a new Wesleyan Chapel at Lucan, Co. Dublin.

ROYAL DUBLIN SOCIETY.—At a stated general meeting of the society, held on the 7th inst., John R. D'Olier, Esq., in the chair, the following resolution was passed:—"That it is desirable that the Museum of Natural History be opened to the public, free of all charge, on Sunday afternoons, and that the council be requested to take steps to act in conformity with this opinion."

SALE OF WORKS OF ART.—The sale of the third portion of the Shandou Collection of works of art and vertu, formed by the late Mr. Robert Napier, of Glasgow, was brought to a conclusion on Thursday, by Messrs. Christie, Manson, and Woods. The second day's sale realised £690 3s. 6d., and the third portion of the collection produced £4,625, making a grand total for the three portions already sold of £48,425.

THE TREES IN SACKVILLE-STREET.—Some people inform us that these trees are growing, but

we have failed to see whether it is upwards or downwards, healthy or rotten. They are plane trees, we believe—very plain trees, and not likely to make much noise in the wind or the world. They have a habit when they cast their leaves in autumn to be in doubt about the necessity of renewing them, thinking it scarcely worth their while to look green again.

"SIGNS OF THE TIMES."—An article has appeared in a daily contemporary during the last week on mud and macadam, which speaks volumes as to the state of mind of the individual who penned it. Thank goodness that, owing to the kind-heartedness of a former great Dean of St. Patrick's, this city has an asylum where those whose intellects are obscured by mental darkness may retire. Swift was a wise man and a good man in providing a home for those who lost their reason, or were never born with any. Perhaps

"He showed by one satiric touch,  
No nation needed it so much."

DEATH OF AN ARCHAEOLOGIST.—The death of Dr. Paul Goldschmidt, from jungle fever, is recorded in the *Athenæum*, which took place in Galle on the 7th ult. He had been appointed by the Ceylon Government to collect and edit the rock inscriptions, and to report on the ruined temples and cities of the island. During the two years and a-half that he was thus engaged on the archaeological survey he had collected a vast mass of materials for the elucidation of the ancient history of Ceylon, some of the results of which have from time to time been published.

THE ROYAL GEOLOGICAL SOCIETY.—A general meeting of the society was held on Wednesday evening in the Lecture Theatre of the Royal Dublin Society. Papers were read—by Rev. Dr. Haughton, F.R.S.—"Abstract of a new method of calculating numerically the absolute duration of Geological Periods." By Professor Adams, F.R.S.—"Observations on Remains of Mammals found in a fossil state in Ireland." By Messrs. Laurence and Hutchinson.—"On the Composition of the Buxton Limestone, and on the Lime suitable for the manufacture of Bleaching Powder."

THE BEQUEST OF A CITY ARCHITECT.—The executors of the late Mrs. Bunning, widow of a former city architect, have presented to the Corporation of London, for the use of the Guildhall Library, two pictures by David Roberts, R.A.—the one, "The Nave of St. Stephen's, Vienna," and the other, "A Street in Antwerp," of the value of £1,150. In accordance with Mrs. Bunning's will, they had been offered to the Government to be added to the National Gallery; but the offer was declined, with the explanation that enough specimens of the artist's work were already hung there.

THE ANTIQUITY OF VACCINATION.—The *Medical Press and Circular* says that Dr. Huillet, medical officer in charge of Pondicherry, has availed himself of a sojourn there to verify the truth as to whether vaccination was practised in India in very remote periods, and he has found the mention of variola and cow-pox in a work attributed to Dharwantari, who lived many years before Hippocrates. William Bruce, consul at Bishra, believes that vaccination was for a long time practised in Persia, and Humboldt says that for a number of years the inhabitants of the Cordilleras had noticed the preservative effects of vaccine. Without doubt the ancient author of Sataya, Grantham, is entitled to priority; but it was a Frenchman, Rabaut Ponnier, brother of Rabaut St. Etienne, Protestant Minister at Massalargues, near Lunel, who discovered in 1784 that inoculation from the teat of a cow was a preventive against small-pox. He communicated his idea to two Englishmen, Ireland and Pugh, who spoke of it to Jenner.

## TENDERS.

Tenders for New Town Hall, Kingstown.  
Mr. J. L. Robinson, architect:—

Hammond	..	..	..	£16,463
Dixon	..	..	..	16,027
Donnelly	..	..	..	15,289
Cunningham	..	..	..	13,594
O'Hara	..	..	..	13,184
Donovan	..	..	..	12,309
Meade and Son	..	..	..	12,240

## TO CORRESPONDENTS.

T. K. (Balbriggan).—Newland's "Joiners' Assistant" is published in 24 parts at 2s. each. If found, the price would be 58s. We can forward it to you from our office on receipt of P O order for amount.

RECEIVED.—Sanitas—W. C. B.—M.D.—A Citizen (dealt with in present issue)—Member of a Building Society (ditto)—An Artizan (re-write your letter, and put the matter stated into a smaller compass)—C. E. (thanks)—Caxton (perhaps we may)—W. B.—T. C. D.—M. A., and others.



## THE ROYAL IRISH ACADEMY.

A MEETING of the Academy was held on Monday evening,

Sir ROBERT KANE, President, in the chair.

The Rev. J. P. Mahaffy read a paper "On Recent Excavations in Greece." Dr. Mahaffy, who has recently returned from a visit to Greece, gave a description of the more interesting objects found in the recent excavations carried out under the superintendence of Dr. Schliemann, and said that the first question that presented itself in reference to these objects was, are they ancient? A gentleman, of some antiquarian knowledge, whom he (Dr. Mahaffy) had met in London, had expressed the opinion that they were mediæval. He (Dr. Mahaffy) was of opinion that they were certainly very ancient. He came to this conclusion because of their similarity to ornamental objects of ancient dates in other countries, and also because of the absence of inscriptions. The second question was, were they native or were they imported? He had no doubt now that they were native—a conclusion which he thought might fairly be drawn from the contrast between them and the imported articles. The third question, and the most difficult, as it was the most important, was—do they truly represent the state of things described in the Homeric poems? He (Dr. Mahaffy) dated Homer later than Dr. Schliemann. He fancied that Homer, as we have him, was not earlier than the eighth or, perhaps, the seventh century before Christ. He thought it was not impossible that these tombs, which Dr. Schliemann had discovered, existed before Mycenæ was built.

Dr. Ingram, in moving that the paper be referred to the Council for publication, said that the Academy were deeply indebted to Dr. Mahaffy for giving to it the first draft of what would, no doubt, in a more complete and finished form, be shortly placed before the public.

Dr. Haughton, in seconding the motion said that he should not presume, under ordinary circumstances, to do so; but when he considered the circumstances in which the Academy was at present placed, he thought there would be some appropriateness in his seconding the motion, representing as he did a branch of the Academy's labours distinct from that represented by Mr. Mahaffy. He rose, in the name of science, to protest solemnly against the attempt that had lately been made to separate science from our humanities. He could not profess much knowledge of the subject of Dr. Mahaffy's paper; but he yielded to no man in his sympathy with Dr. Mahaffy and those who cultivate these branches of knowledge. He hoped that in that Academy they would never be divided into classes. At the same time he hoped Dr. Mahaffy would not be displeased if he claimed the right to believe that Moses wrote *Exodus*, and that Homer wrote the *Iliad*. Dr. Mahaffy and Dr. Ingram might talk till they were black in the face, but he would never hold any other opinion. He preferred to believe that Dr. Schliemann had found the bones of old abominable Clytemnestra and the rest of them rather than to go in with those great classical scholars, misled, he believed, by the German critics, for believing that Moses was not Moses, and that Homer was not Homer.

Dr. Sigerson read a paper (by Professor Leith Adams "On Irish Fossil Mammals," which also was referred to the Council for publication.

## INSTITUTION OF CIVIL ENGINEERS OF IRELAND.

A GENERAL meeting was held in the Museum Buildings, Trinity College, on the 6th inst., ROBERT MANNING, Esq., C.E., past-President, in the chair.

A discussion took place on the paper read at previous meeting, "On a New System of Wood Pavement," by J. Angelo Fahie, Assoc., Inst. C.E.I.

Mr. J. P. Griffith objected to the new

system, on the ground that it was more expensive than others. In point of sanitary value, asphalt was much preferable to wood pavement.

Mr. Browne held that this description of pavement would be more noisy than any other, on account of the solidity of the blocks in which it was proposed to be laid. There would be a difficulty in adjusting it to the kerb stone, while in order to repair one of the blocks it would be necessary to tear up a considerable quantity of the pavement. On the whole, he thought this was about the worst description of pavement yet invented.

Mr. Chas. F. Green took an opposite view, and said he thought the unusual depth of the paving block proposed under the system rendered it unnecessarily expensive and complicated.

Mr. J. W. Houghton said that no description of pavement had been tried so long as wood, and after all they had fallen back upon it. It was, however, found very costly, the joints were liable to retain water, and wherever there are joints there are concave surfaces, which are objectionable for traffic. The day would come when they would lay down pulverised granite in the same way as asphalt, and he thought rough concrete must eventually supersede any existing pavement.

Mr. Alexander M'Donnell, past-President, did not agree with the last speaker, for if they had got a good stone there would be nothing gained by pulverising it. Concrete would break and go out in small hits. Mr. M'Donnell read a paper from Mr. Charles P. Cotton, in which that gentleman said he could not call to mind any street in London where the wood pavement had been laid for the term mentioned in Mr. Fahie's paper—viz., 37 years, and therefore they hardly yet knew exactly what the life of wooden pavement was. Nothing could be nicer than asphalt where the roads were generally level, but a piece of asphalt with granite road at each end of it was a nuisance to everybody. Wood pavement was better for steep streets than stones, and it was a great pity the Dublin Corporation did not give it a trial before embarking so largely in stone pavement. He disapproved of the use of beechwood. Mr. M'Donnell said that beechwood, if not creosoted, would rot immediately, but if creosoted it would last for an immense time. The three descriptions of wood—beech, elm, and Scotch fir—had been tried at the King's-bridge, and it was found that the last-named kept a more level surface than the others. In this new system the blocks seemed to be expensively cut. The wooden pavement formerly laid in London had no foundation, and of course that alone was sufficient to cause its failure. He did not know of any case in London where the blocks had been worn out without having rotted first.

Mr. Treffry said the wood pavement had been used in London to prevent noise. From a sanitary point of view he believed there was no objection to it; but he found that the water accumulated, and there was a scatterment of the blocks right and left.

Mr. M'Donnell said it was a mistake to say that wet rotted wood. It was the wetness at the bottom and the dryness at the top that caused the rotting.

Mr. Robinson (the patentee) explained the principle of the new system. The cost would be 16s. per square yard, including foundation and everything. The locking of the blocks together was a great advantage, for it distributed the weight evenly and prevented any of the blocks sinking.

After some further discussion, the meeting adjourned.

## THE WIGS ON THE HILL!!

ON Thursday last, when the subject of the visit, next year, to Dublin of the British Association was brought forward at a meeting of the "City Fathers," it was sought to prove that a slight had been attempted to be shown to the Corporation in the matter of the initiation of the movement for the recep-

tion of that learned body. The following is reported amongst the proceedings:—

The Hon. J. P. Vereker, barrister-at-law, said it appeared to him that the whole discussion, and the manner in which it came before the house, was altogether irregular and undignified. It was usual when a great learned body like the British Association visited a city for the Lord Mayor to originate the reception proceedings as he thought fit, and he (Mr. Vereker) protested against any little society like the Statistical Society saying to Mr. Norwood, "Go, and represent the city of Dublin, and manipulate the Lord Mayor."

Dr. Norwood rose to speak, but

Mr. Vereker protested against being interrupted, and continued to say that the Lord Mayor was not the creature of the Statistical Society. He was not to be put into motion by a learned society, the name of which was withheld from them. As head of the chief municipality of Ireland he should take the initiative in these matters, and it was his place to invite other subordinate bodies to co-operate with him. He (Mr. Vereker) felt, therefore, that they were only moddlesome and impertinent in presuming to come before the Lord Mayor in this hole-and-corner manner, and try to make a cat's paw of him. He had sense enough of the dignity of his position—a position which no Lord Mayor had filled with more dignity—to resent such a proceeding.

John Norwood, LL.D., barrister-at-law, craved permission to say a few words after these exceedingly unpleasant remarks, spoken in utter ignorance of what he (Mr. Vereker) was speaking about. A very large meeting, summoned by the Board of Trinity College, had been held, and a number of learned societies were represented, but who the gentlemen were, he (Dr. Norwood) did not know. He had merely attended the meeting, having been nominated by the Statistical Society to do so, and he might remark that the Statistical Society was not so obscure a society as Mr. Vereker seemed to think; but, perhaps, he did not take the interest in the affairs of the country which would enable him to know that that society had for many years done good service to the State, and had originated many matters of social importance to this country. However, that was outside the question. If any societies had been omitted, it was for the Lord Mayor or that Council to repair the mistake. He (Dr. Norwood) would be the last man in the Council to think of derogating from his lordship's dignity. He had always defended the Council as loyally as Mr. Vereker, and had done just as much service, and he could not but regret the unseemly observations which had fallen from Mr. Vereker.

The standing orders having been suspended, it was resolved, on the motion of Mr. Dawson, seconded by Mr. Vereker—That the part this Corporation shall take in the reception of the British Association, shall be taken altogether under the guidance and patronage of the Lord Mayor, and in such a manner as he shall think fit.

## NOTICE.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

Correspondents should send their names and addresses, not necessarily for publication.

It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.

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## THE IRISH BUILDER.

VOL. XIX.—No. 421.

## THE CAXTON CELEBRATION.

THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

## FIRST PART.



NEW view of the Caxton Celebration and exhibition of printing materials, works, and appliances, just opened, we thought it would not be amiss in an Irish journal devoted to literary and professional interests to give some historical account of the rise and progress of printing and publishing in Ireland.

It is not necessary at this date, with numerous works accessible, to enter into detail concerning the discovery of the art, and the claims put in respectively for the four principal men whose names have figured principally in the controversy. Gutenberg, of Strasburg; Faust, of Mentz; Schoeffer, or Gernsheim; and Coster, of Haerlem, have had each their warm advocates, and particularly among their own countrymen. Though block printing with single pieces of wood can be traced as far back as the thirteenth century, the credit is accorded generally to Gutenberg of being the first who employed moveable metal types in the production of his

works. To Schoeffer, however, belongs the merit of inventing matrices for casting types, each single letter hitherto being cut in wood or metal. This invention of course constituted one of the most important improvements in the technical history of printing. The art soon spread on the Continent, and before 1500 there were between two and three hundred places in which there were printing offices.

In the earliest printed books the characters of the type employed were the old Gothic or German. Sweynheim and Pannarts introduced the *Roman* type at Rome, and Aldus the *Italian*. The art in England was introduced somewhere between 1471 and 1474 by William Caxton, who established a printing-press in Westminster Abbey, and by his learning, ingenuity, and labour, contributed much to the improvement and extension of the art. Two of Caxton's most distinguished successors were Wynkyn de Worde and Richard Pynson. After this the art progressed fastly, and ere the middle of the sixteenth century printing in England attained a flourishing condition. It may be noticed here, however, that although Caxton and Wynkyn de Worde had been distinguished as type founders as well as printers in the infancy of the art, type founding after their death almost collapsed. The types used by English printers up till several years in the eighteenth century were cast in Holland and

other Continental towns. Some time about 1720 William Caslon effected a new departure by cutting sets of punches, and his types were so well cut that the importation of foreign type fell off, and eventually English printers were enabled to be supplied wholly at home.

## PRINTING IN IRELAND.

The first attempts at printing in Ireland are enveloped in much doubt, and the few disciples of Faust and Gutenberg who found a footing in this *Insula Sanctorum* had no unusual obstacles to contend against in the exercise of their mystic art, and the preservation of their lives and household effects. It was not the rage of the rabble or the superstition of the mob that beset them, but high-handed and irresponsible authority often swooped down upon them, seized their plant, and, if failing to capture the unlucky printers, outlawed them by warrant or ukase for their "seditious and treasonable practices." The early printers, publishers, and booksellers of Ireland, in the eye of the law, were always a contumacious and stubborn race of dare-devils, who had not the fear of God nor respect for the Executive before their eyes. They were narrowly watched, and though licensed betimes, were scarcely trusted, except when State printers, to pursue their calling without a constant espionage. The truth of these statements will be seen as we proceed. Ireland was one of the latest of the European nations into which the art of printing was introduced, but it is not to be inferred from this that learning was at a very low ebb in consequence. The monastic establishments of the country were nearly all of them seats of learning, and the pens of the monks and their assistants and contemporaries, the native genealogists and historiographers, were busy. Piles of Irish MSS. in the native dialect and the Latin tongue were to be found in every ecclesiastical institution; and art as well as caligraphy was encouraged and assisted to live in the composition and illuminating of manuscript volumes on various subjects. Whatever may have been the shortcomings of the monks and friars of old, the literature of their religion and their country's history had for them an undying charm. They worked diligently and laboriously and toiled incessantly at this labour of love in writing, collating, transcribing, and translating, long centuries ere a "first proof" passed from under a printing press on the soil of Ireland.

In Palmer's History of Printing published in 1733, among the printers of Venice we have it stated—"Octavian Scot (Schott) was a nobleman of the city of Mons, who set up some presses at Venice at his own charge, and printed a great number of curious editions, all of which are marked with O.S.M. His chief corrector was *Maurice de Hibernia*, or of Ireland, a Franciscan Monk, who was afterwards made bishop of Tuamo (Tuam); all the editions we have of Octavian Scot are 39 from ann. 1480 to 1498." Elsewhere we have it stated that "*Maurice de Hibernia*, afterwards bishop of Tuamo," was also a corrector of the press in Venice, in the printing establishment of "Benett Locatelli." The Irish ecclesiastic and corrector of the press above alluded to was Maurice O'Fihiley, or Maurice de Portu, whom Julius II. promoted to the episcopal see of Tuam in 1506. Honourable mention is made of his name and labours in Father Mooney's Latin Manuscript History of the Irish Franciscan

Houses, written in 1616, a good version of which is given in the recent work of the Rev. C. P. Meehan, in his "Rise and Fall of the Irish Franciscan Monasteries and Memoirs of the Irish Hierarchy." Maurice O'Fihiley, according to Father Mooney, was a wonderful scholar, and his literary works confirm the statement. He appears to have been a native of Cork, and after the completion of his studies in Padua, he taught philosophy in that city, earning a wide reputation at the same time by the variety of his writings. Being a corrector of the press for Benedict Locatelli and Octavian Schott, and being a voluminous author himself, it is not too much to suppose that the Irish ecclesiastic brought a practical knowledge of the art of printing with him to Ireland.

As printing houses were set up in connection with several of the monastic and religious houses in England, and books issued therefrom, viz.:—St. Alban's, as early as 1486; Tavistock, 1525; Worcester, 1548; and at Canterbury in 1500; it is also most likely that printing was carried on in connection with some of the Irish monastic establishments during the sixteenth century.

The first efforts at printing in Ireland were confined most exclusively to tracts and books connected with the services of religion and the Church. Before the year 1600 very little of any sort of printing was executed in this country. One of the earliest was the following—"The Book of Common Prayer and Administration of the Sacraments and other Rites and Ceremonies of the Church of England. *Dublinæ: in Officina Humphredi Poweli, cum privilegio ad imprimendum solum. Anno domini 1551.*" This book was in black letter; the copy in Emanuel College Library is large quarto.

In Palmer's work a William Powel is noticed as a London printer in 1547, "at the sign of the George, next to St. Dunstan's Church, in Fleet-street." The name of an Humphrey Powel, a relation most likely, is also mentioned by Palmer as established in London in 1548; and works were printed by him there in that and the following year. It would appear from what is stated above that Humphrey Powel afterwards carried on or established a printing business in Dublin.

There are many early tracts and prints bearing date as printed at Waterford during the sixteenth century, or during Mary's reign, and subsequent, but it is doubtful in most of these cases that they were printed in Waterford. Our history supplies us with no data as to the existence of any press at Waterford so early.

These works, and others without name, were perhaps printed on the Continent, or, what is quite possible, privately printed in this country or in the sister kingdom. For upwards of a century and a-half subsequent to this, Irish churchmen and others were in the habit of printing their works abroad—in France, in Flanders, and Italy; but it is not to be taken for granted, because they may bear a foreign *imprimatur*, they were all printed abroad. The disturbed state of Ireland in the sixteenth and seventeenth centuries was most unfavourable to any progress in the art of printing. Many Irish works on Irish language and literature were published in Rome and other continental cities down to the eighteenth century; works written by Irishmen and Irish ecclesiastics. The title of one of those works printed at Waterford begins thus—"The Acquitall and Purgation



of the most Catholyko Christen Prince Edward the VI., Kyng of Englande, Fraunce, and Irelande, &c." It is dedicated "To the nobilitie and to the rest of the charitable Christen laytie of Englande. John Oldo wisheth grace and mercy from God the Father and from Jesus Christ the common and only Saviour of the world, with the gifte of porfite faithe and earnesto repentaunce." This work is printed in black letter, with quotations in italics, and bears date "Em-printed at Vwaterford the 7 daye of Nouembre, 1555." Another book in similar type and letter, also supposed to be printed at Waterford, begins its title thus—"An Epistle Written by John Scory, the late Bishop of Chichester, vnto all the Faythful that be in Pryson in Englande, or any other Troblo, for the Defence of Goddo's Truthe," &c. At the end, "Apoca 22 veni Domino Jesu cito anno 1555." This work has no printer's name, nor indication of the place where printed.

In 1571 we find that Nicholas Walsh, Chancellor of St. Patrick's, brought printing types in the Irish character to Dublin. A catechism, translated into Irish by John Kerney, Treasurer to St. Patrick's, is supposed by many to be the first book printed in this character in Ireland. This was while his companion and friend, the above Nicholas Walsh, was at St. Patrick's. John Kerney assisted in translating the Bible into Irish, which was extant in Sir James Ware's time. It is alluded to in Harris's translation of Ware on "Irish Writers."

In 1566 or 7 an Irish Liturgy was printed for the use of the Highlanders of Scotland. In the latter year a form of prayer printed in Gaelic was issued by John Knox, but this was printed at Edinburgh. A translation of Calvin's Catechism appeared in 1631, and in 1631 the Presbyterian Synod of Argyle issued translations into the Gaelic of the metrical psalms. In 1690 the first Bible was published for the use of the Highlanders. These works were all in the Irish orthography and the Irish dialect, but none of them, as far as we can find, were printed in this country. We mention them here because belonging to our language. Sir Henry Sydney ordered all the statutes enacted in Ireland from the first institution down to his own time to be collected and printed. Sir Richard Bolton, Lord Chief Baron of Ireland, in a new edition printed in Dublin in folio, 1621, supplied several defects in the former edition. John Vowel *alias* Hooker, a Burgess of the Irish Parliament in 1568-9, collected and published in 1572 "The Order and Vsage of Keeping of the Parliaments of England." It is inscribed "To the Right Honourable his very good Lord Sir William, Fitz VWilliam, Knight, L. deputye of Ireland Iohn Vovvel *alias* Hooker vvith all humbleness and due reuerence vvisheth a happy successe and a prosperous governmēt to th' increase of God's honor in true religion, the Queenes Maiesties Seruice in due obeidance and the administration of the publike vvethlth in Iustice Equitie and Iudgment."

In 1571 we find Vowel in England busy compiling and collecting all the ancient forms and usages of the law, and keeping his faith with his patron Sydney. Vowel was elected as member to Exeter in the Parliament held at Westminster, 13th Elizabeth, 1571. Vowel's latest legal work is inserted in Hollinshed's Chronicle, 1586. Where the work of Vowel was printed separately we are

unable to learn, but it bears some internal evidence, from certain expressions used, of having been printed in Ireland. It is quarto in size. Irish almanacks appear to have been pretty early printed in this country. One William Farmer wrote an almanack, printed in Dublin in 1587, and had successors for years, "Weather Prophets," but not until after the Battle of the Boyne did these impostors grow much in number. Then we find the noted Dr. Whalley, followed by Compstey, a French refugee or Flemish soldier, and Laboissiere. These "starry interpreters" were succeeded in turn by less able and more illiterate impostors. Next comes Isaac Butler and John Smyth, each contending they were the legitimate successors of the famous Whalley. Butler claimed to be a student in astronomy and botany. The printing and publishing of almanacks in Ireland proved a pretty profitable trade from their first starting in Ireland down to the present century. John Smyth, of Elbow-lane, Meath-street, "gives his advice from the stars in 1759," and a watch mender in Cork edited the "Lady's Almanack." The first publication of "Knapp's Lady's Almanack" was in 1737. After his death it was started in Dublin under the title of "Knapp's Redivivus." Nicholas Grant, of Newry, a shopkeeper and schoolmaster, compiled an almanack which was printed by Jackson, of Meath-street, in this city, and after Jackson's death the copyright of two or three popular almanacks passed into the hands of P. Wogan, bookseller, of Ormond-quay. They continued to publish them for several years, and several law suits were instituted against other "Starry interpreters" for infringing copyright. Jones, a bookseller of Thomas-street, published a piratical edition of these almanacks. We allude to these almanack makers at length because they afforded a good deal of employment and work for the printing trade in Ireland, and from the fact they formed a good portion of the work of the trade at one time in this city.

An "Irish Common Prayer," printed in the Irish character, dedicated to Sir Arthur Chichester, Knight, Lord Deputy General, by William, Archbishop of Tuam, appeared in October, 1609. It was "printed by John Francton." It was a folio. Francton's name does not appear to any other publication that we have found, nor do we believe that his name is to be met with in connection with the Stationers' Company of London. Where he commenced the exercise of his art, or learned it, we do not know.

As an evidence of the danger of printing or publishing in Ireland works that were obnoxious to the State, we may instance the work of Doctor Peter Lombard, the Roman Catholic Primate of Armagh. His work *De regno Hiberno Sanctorum Insula*, &c., although not printed till 1632, some few years after Lombard's death, and issuing from the press at Louvain, yet its publication in Ireland caused not a little annoyance to the authorities. Secretary Windebank, the 20th of November, 1633, writes to Lord Strafford, the Lord Lieutenant—"His Majesty, understanding that there is one Petrus Lombardus, or that calls himself so, who had lately published a dangerous book in those parts, concerning O'Neile, requires your lordship to suppress the book, and send some of the copies to my Lord Canterbury, and to call the author to account for it." It is quite possible that an edition of Primate Lombard's

book might have been privately printed in Ireland.

Lombard was a native of Waterford, where he was born in 1560. He received some of his education at the Westminster School, and went from there to Oxford, where he met many of his countrymen. In 1614, when he was Archbishop of Armagh, he was noticed by King James in his speech from the throne, as one who disturbed his government. Authors and printers, clerical and lay, unless they worked in the service of the State, ran great risk of safe necks in Ireland in the early days of the printing trade.

The first Dublin newspaper was printed or published by Robert Thornton, bookseller, at the sign of the Leather Bottle in Skinner's-row, A.D. 1682. It comprised a single leaf of small folio size printed on both sides, each number being dated, and commencing in the form of a letter with the word "Sir." In 1700 the first regular newspaper entitled "Puc's Occurrences" made its appearance. Castle-street was the principal haunt of booksellers previous to and during the eighteenth century, and one Eliphod Dobson (a not very euphonious name) was one, if not the most wealthy bookseller in Castle-street. His house was called the "Stationers' Arms," and it flourished during the reign of James II. During the Commonwealth there was only one printer who proclaimed his craft and followed his calling with the permission of the authorities. The law was arbitrary, and printers were not to be trusted, for fear they would set the Liffey on fire. Works about to be printed during the Commonwealth had to be submitted to a Clerk of the Council to receive his *imprimatur* before being published. Under the reign of William the press in Dublin and the printing trade were equally and arbitrarily trampled upon. Malone was dismissed from the office of State printer and was tried with John Dowling at the Queen's Bench for publishing "A Manuall of Devout Prayers," intended for the use of Catholics. This was in the year 1707. In 1698 William Molyneux, a member of the University of Dublin, published a work entitled "The Case of Ireland Stated." This book was condemned to be publicly burned by the common hangman. From this period till nearly the close of the eighteenth century, printers and publishers and booksellers in Ireland were obliged to be careful of what they printed against the powers that ruled.

Swift published with a vigour and a vengeance early in the eighteenth century, and his printer and publisher, whenever they could be found, paid penalty for their "high crimes and misdemeanours." His "Drapier's Letters" startled the Executive, and rewards were offered for the discovery of the printer. It is supposed that the satirical dean had a private printing press of his own, and that many of his "treasonable" tracts were worked off *sub rosa*. An incident that occurred several years ago during some alterations or demolition of a dwelling once occupied by Swift, would seem to prove the fact of the author of Drapier's Letters having a private printing press, some plant and mechanism of a printing press having been unearthed. From the middle of the eighteenth century until its close, the printing, publishing, and book-selling trades in Ireland made rapid strides, though a great quantity of the works were reprints of English and foreign books.

Although comparatively few works were



printed in Ireland from the first establishment of the art on the introduction of the printing press down to the year 1700; yet we can assert with the most ample proofs that very good printing in various styles has been carried on in Ireland for the last 200 years. Works have been issued from the Irish Press in the eighteenth century that could bear comparison with many issued in England or abroad at the same period—works not only confined to mere letterpress but several ably illustrated and in a state of artistic execution connected with every branch of the art, from paper making to binding and lettering.

We may fitly conclude our first article with the reproduction of the "Booksellers' Charter Song, &c.," written by a Dublin bookseller and poet of the name of Fegan or Fagan in 1840, and sung on the occasion of one of the late John Cumming's annual book sales in that year. In our next paper we will retrace our steps a little by giving some account of the trade and lives of the worthy native printers, publishers, and booksellers whose names occur in the following poem, as also of others more or less distinguished in their professions, from towards the close of the seventeenth until the middle of the present century.

### The Booksellers' Charter Song, &c.

Air—"The Fine Old English Gentleman."

I'll sing the praise of our proud Trade, since *Fourteen sixty-nine*,  
The glorious freedom of the Press, which never lay supine;  
And call to mind the noble souls of other days long past,  
Whose actions glow like beacon lights, to guide us to the last:  
In solemn silence drink to those, all of the olden time.

Why not remember Britain's sons, who lent, by art and pen,  
Their aid, to snatch from Ignorance, worlds of unlettered men?  
Who smote that demon to the earth?—I'm sure you all can guess,  
It was renowned *Will Carpton*, with his fine old wooden press:  
In silence drink his memory, his of the olden time.

*Wynken de Worde*, and *Wynson*, first printer to Harry Eight,  
*Uetion*, *Julian Potary* and *Machlinia*, still more great;  
*Will Jaques*, and *Henry Paywell*, first Bookseller of those times,  
And *Bretton*, who first imported books from Europe's lettered climes:  
In solemn silence drink to those, all of the olden time.

*Skott*, *Godfrey*, *Rastell*, *Butler*, the *Copelands*, and old *Wyre*,  
*Redman*, *Banks*, and *Andrew*, who transfused the living fire;  
*Keynes*, *Byddle*, *Gibson*, *Grafton*, and the famed *Miles Coberdale*,  
Whose name shall stand recorded through England's woe or weal:  
In solemn silence drink to those, all of the olden time.

*Petit*, *Weyland*, *Hester*, *Lant*, *Middleton*, *Keynald*, *Wright*,  
*Wolf*, *Powell*, *Lynne*, and *Porton*, who tore from darkness, light;  
And flung its rays o'er all the earth, which smote the power of hell,  
That now shall sleep for ever, 'neath old *Carpton's* wooden knell:  
In solemn silence drink to those, a long and fond farewell.

Besides some thousand noble souls, whose names I can't recall,  
Yet shine in *Old Black Letter*, as the writing on the wall;  
But come we to a class of men, who shone beyond our seas,  
Who took from Death his sable lock, and melted down his keys,  
And opened wide the gates of life, for ages and for days.

Faust, Guttemberg, Manutius, Aldus, Baynard, Froben too,  
The Elzevirs, and Stephens, Burman, Plantin, and Barbou;  
And next, the Bibliographers, Harless, Renouard, Marsh, De Burc,  
Harwood, Maittaire, and Panzar, with all the rest, I'm sure  
You'll drink in solemn silence, those of the olden time.

And next, our great Historians, Stowe, Grafton, Hollinshed,  
The Dramatists, Will Shakespear, Fletcher, all the illustrious dead;  
Our antiquarians, Britain's stars, Grose, Carter, Strutt and King,  
With Dugdale, Ware, and Weever, of whom I love to sing:  
In solemn silence drink to those, all of the olden time.

Once more I claim your special grace, let every glass be drained,  
In sweet remembrance of the men who o'er our Press long reigned,  
First Bensley, Boydell, Baskerville, Reeves, Foulis, Kincaid, Bowyer,  
George Faulkner, Chambers, Ewing, White, with many hundreds more:  
You'll drink in solemn silence, these of the modern time.

If we have drunk with ecstasy, the memories of those gone,  
Come let us give a bumper to Bentley, Murray, Bohn,  
To Longman, Cadell, Colburn, to Pickering, Priestly, Sharpe,  
Who give to trade its varied tones as strings upon our harp:  
In rapture drink their honored healths, these of the present time.

And now with proud enthusiasm, we'll give the noble souls,  
Who guide the Press of Britain, whilst with lightning's speed it rolls,  
The pilots, Boyd and Oliver, Black, Simpkins, Ballantyne,  
Our Dublin Folds, and Belfast Symms, in sparkling champagne wine,  
With cheering rapture drink their healths, these of the present time.

I'm now at home—fill up each glass, we'll drink our noble selves,  
And first, *JOHN CUMMING's* honest health, long may he fill our shelves;  
Smith, Curry, Tyrrell, Webb, Keene, Tims, Grant, Milliken, and Coyne,  
And our own *SHARPE*, whose knock is felt, from London to the Boyne,  
With cheering rapture drink their healths, these of the present time.

### THE WORKING CLASSES IN PRUSSIA.

AMONG the working classes of Prussia (says the *Builder*) the miners and iron-workers occupy an exceptional position, inasmuch as their welfare and interests are attended to by the Government officials who are appointed to superintend all the mines, iron-works, and salt-works of the kingdom. This class of the labouring population is animated by an honourable *esprit de corps* dating from the

earliest times, and forming a singular exception to the egotistical tendencies prevalent amongst the working-classes of the present day. The great importance naturally attached to the conservation of so able and staunch a race of workmen as these miners and iron-workers has induced both the State and the private owners of the larger works to provide suitable dwellings for them, and to make such general provision for their comfort and well-being as to make their lot an enviable one in comparison with many of

their fellow labourers. They seldom, however, succeed in amassing any considerable savings, and some of them emigrate from time to time to other countries where the mining interest is on a smaller scale than in Prussia. The miners and iron-workers of Upper Silesia are almost exclusively Poles, and contrast unfavourably with the German workmen in their addiction to debauchery and dissipation, so much so that in many of the works where they are employed measures have been adopted for paying the weekly wages due to them to their wives, to prevent them from squandering their earnings instead of supporting their families.

By far the greatest portion of textiles are manufactured by the weavers in their own houses, with the assistance of the members of their families or of journeymen for large commercial houses and manufacturers. The latter supply the materials, and buy up the textiles at certain prices previously fixed upon. The large silk manufactories on the left bank of the Rhine, for example, are able to give employment with the necessary materials to the handloom weavers for several months at a time. A direct communication being established between the manufacturer and the weaver, the services of a middleman are not required. The weaver, as soon as he has finished his work, takes it to the manufacturer, and brings back with him a fresh supply of material. This class of weavers is tolerably well off. They are in possession of good looms, and are generally considered as sure to earn a decent livelihood. When the linen industry received its death-blow fifty years ago, most of the weavers of Middle Silesia turned their attention to cotton-weaving; but as they could not afford to purchase the new looms, they had to work on credit; and being completely at the mercy of the large manufacturing and commercial establishments by whom they were employed, were obliged to accept the lowest possible wages. Attempts have been made, apparently with small success, to draft those Silesian handloom weavers into other branches of industry and other occupations. Of the more important groups which constitute the working classes of Prussia, these weavers, numbering about 30,000, are undoubtedly the poorest, the worst fed, and, from their weak physical constitutions, the least capable of raising themselves unassisted above their present condition.

Foremen of works in factories, managers of printing offices, foremen of mines, and other such like head men and overseers, employed in industrial establishments, are considered more in the light of *employés* than of workmen, and in disputes between the masters and the men they generally side with the former. This intermediate class is certainly one of importance and influence in the social and economical questions which are constantly arising between the representatives of capital and labour, and yet it is by no means treated with the consideration which it deserves. The reason is that there is always an abundance of educated men in the country who are only too glad to be able to obtain employment of this kind. The salaries paid to persons of this class are just sufficient to provide them with the means of living in tolerable comfort, but they are considered lower than what are paid to a similar class in every other country.

Porters, loaders, packers, and such-like labourers, who are employed to do heavy work of all kinds, whether for commercial and industrial establishments, or in seaports and inland towns, generally earn good and even high wages, as the great physical strength required for this sort of labour is rare enough to prevent the labour market from being overstocked. These people soon save a sufficient sum of money to enable them to set up an independent business as carriers, small shopkeepers, &c.

As regards wages, whenever the character of the work rises above mere coarse manual labour, and approximates more to that of the skilled labour of the artisan or manufacturer, the rates of wages rise to above 2s. 6d. a day.



Miners employed on tunnel work are paid up to 3s. a day, and in the circle of Gorlitz a brickmaker and his wife can earn during the summer 3s. 9d. a day, and in the circle of Janir from 24s. to 30s. a week. For work coming within the category of skilled or art industry, and for work requiring more than common technical skill, wages rise to a progressively high standard, enabling the artisan to earn from £75 to £90 a year and upwards. The wages of modellers and enamellers in iron foundries, of smiths and carpenters in machine works, are from 3s. to 4s. 6d. a day.

Throughout nearly the whole of Prussia, artisans, journeymen, and apprentices work regularly in the summer from 5 a.m. to 12, and from 1 p.m. to 7, and even later, and in winter from daybreak sometimes from 6 a.m. to 8 or 9 in the evening. The hand-loom weaver frequently sits at his loom employed in monotonous labour for sixteen hours a day; and agricultural labourers have to work hard for twelve hours a day out of harvest time, and during harvest time fourteen hours.

#### CLAYTON'S PATENT FIRE ESCAPES.

SINCE our last issue an opportunity was afforded us for inspecting one of these efficient fire escapes, which are now coming into general use. Some years have elapsed since their first introduction by their inventor and patentee, and many improvements have been carried out, which have rendered them more and more serviceable. The one which is the subject of our notice was constructed for the Chester Volunteer Brigade, and it comprises all the latest improvements. We have witnessed the working of Mr. Clayton's fire escapes in London as well as in this city, and we have no hesitation in saying that, when manipulated properly, they are fully equal to the work they may be employed upon. They are now used in several English and Scotch cities and towns, and are solely used in Dublin. They have, as a whole, lightness, compactness, and strength combined.

The inventor's description of their construction may be accepted as a very fair one. They are on the telescopic principle, consisting of three ladders of double the ordinary width, so as to admit of the firemen passing when necessary. "The sides are strengthened by galvanised iron lattice-work, which also acts as a protection to persons ascending or descending; the lower ladder rests on a strong frame, with a portion hinged to fold out to give leverage as well as a perfect control over the machine. The wheels, 6 ft. 4 in. in height, on which the escape moves, are attached to the ladder by means of carriage springs; the axle of the wheels forms a windlass by which the ladders are raised by galvanised steel wire ropes; to the windlass is attached a self-adjusting pall for stopping the ladders when required. This machine can be constructed for any height, it can be easily worked, and the ladder raised to a height of 60 ft. in thirty seconds by two men. Many improvements have been recently made in its construction, as suggested by Mr. J. R. Ingram, Chief of the Dublin Fire Brigade. These escapes are constructed of ash, with oak rounds for the ladders, and are considerably lighter than the London pattern escape in use in Dublin. The ladder can be raised to the full height independent of any building; there is no canvas bag or any inflammable material attached to the escape. It can also be brought through the streets in any weather, as there is nothing to catch the wind; it can be raised to any height in a narrow street

where the London pattern cannot be used,—if necessary the ladders can be raised by one man, by placing the head of the escape against the front of the building."

Clayton's fire escapes can be utilised for other purposes besides the saving of life, and they will be found serviceable in many instances where ladders and scaffolding are now applied. The prices range from £65 for a 45 ft. escape, to £105 for a 70 ft. one. The one manufactured for the Chester Fire Brigade was, we believe, a 60 ft. escape, and those of that size cost about £85. For simplicity of make and for the readiness with which they may be handled and put into working order in a few seconds, Clayton's fire escapes challenge attention and deserve a wide-spread adoption.

#### THE PRESERVATION OF THE IRISH LANGUAGE.

THE society formed some months ago for the preservation of the Irish language has issued a very cheering report detailing the progress made. The means proposed to be used are stated, branch associations are in course of formation in several towns and cities in the three kingdoms, rules are drafted out for their guidance and affiliation, and the parent association has a good and sound set of rules, and an efficient council and officers. We trust the Irish people generally, irrespective of creed or class, will respond by kindly aid; and that the young generation will enrol themselves as members of the central or branch associations. The subscription for membership is fixed at a standard that will meet the wants of all parties, and the rules exclude no class. As to the desirability of preserving the Gaelic language we have already spoken. With a thorough national response to the appeal of the society, success is quite certain.

#### OBITUARY.

##### THE LATE W. B. KELLY, PUBLISHER AND BOOKSELLER.

WITH feelings of sincere regret we record the decease of an old and esteemed fellow-citizen, in the person of William Bernard Kelly, who died at his residence 51 Sandymount-road, on the 14th ult., in the 60th year of his age. His illness had been rather a long and a painful one. For upwards of forty years Mr. Kelly has been engaged in the bookselling trade, commencing life in an humble way, at first in Adam-court, but eventually, through perseverance and industry, firmly establishing himself in the bookselling line at 8 Grafton-street. In a short while the enterprising bookseller grew into a respectable publisher, and through his house several creditable literary ventures in periodical literature were issued from time to time, as also a variety of other works. One of the most noted of periodical publications issued by Mr. Kelly was the *Irish Quarterly Review*, through which channel the "History of the Streets of Dublin" appeared, afterwards embodied by the writer, Mr. Gilbert, in his "History of Dublin." Two of the most recent works published by Mr. Kelly were the "Ecclesiastical Architecture of Ireland to the Close of the Twelfth Century," by the late Richard Rolt Brash, Architect, M.R.I.A., and a new edition of the "Monasticon Hibernicum" of Archdall, edited, with extensive notes, by Rev. Patrick F. Moran, D.D., Lord Bishop of Ossory, and other antiquaries. In respect to these works we may note here that Mr. Brash's work first appeared in the pages of the IRISH BUILDER, under the title of "Notes on the Ancient Ecclesiastical Architecture of Ireland," and as regards the new edition of Archdall, another volume has yet to appear to complete the three into which the work has been divided. Two or three years since Mr. Kelly added a branch estab-

lishment to his Grafton-street house by opening a well-stocked bookselling shop at 6 Lr. Ormond-quay. The deceased gentleman was a great collector of rare works of antiquarian character, and did an extensive business for years in second-hand books as well as new. Mr. Kelly was a Roman Catholic in religion, but he was generally respected by all classes of his fellow-citizens. He leaves a widow (but no family) to mourn his loss. The Grafton-street house, we believe, will be carried on as usual by some of his relatives. The funeral took place on Sunday, the 17th ult., and many friends and acquaintances witnessed his interment at Glasnevin Cemetery.

#### BUILDING TRADE DISPUTES— ENGLAND AND SCOTLAND.

In several towns in the sister kingdom disputes still continue on the wages question. In Manchester and Salford the carpenters and joiners are still out, and at Newton Abbot—the masons in each place numbering several hundreds. In the following towns the settlement has been effected:—in Bolton, on the part of the masons; Worcester, the carpenters and joiners; Sheffield, the painters; Crick, the joiners; Dumferline, the plasterers; and at Aberdeen, the carpenters.

#### THE SANITARY RECORD v. THE BUILDER ON SEWAGE VENTILATION.

OUR contemporary the *Sanitary Record* of the 22nd ult., has the following bit of criticism which is worthy of perusal. If written by a doctor, of course we are prepared to admit "doctors will differ"; but at the same time we would ask, is there any necessity for a sanitary child being so snappish with its parent from whom he learned his first lesson in sanitary science?—

The disagreement of doctors, which has become proverbial, is now eclipsed by that which prevails amongst the newly arisen professions of sanitary engineers. One engineer's remedy is emphatically another's poison, and it is not to be wondered at that, perplexed by such a legion of rival and opposite opinions, the unfortunate householder elects rather to suffer the ills he has than flee to others which he knows not of. The chaos of opinions which have been aired with regard to house, drain, and sewer ventilation is, if possible, yet further darkened by the utterance of the chief architectural oracle on May 20, part of which appeared in the *Sanitary Record* of June 9. The *Builder* practically says that all the talk and sentiments which found vent at the late Sewage Conference on sewer ventilation were—to use a better-trade expression—"hush," and that the cutting off communication between house and sewer was sheer mischievous nonsense. The Sewage Conference is not particularly referred to so much as the Banner, Buchan, and Potts systems, but coming directly after the Conference, at which the absolute necessity of disconnection between house and sewer was so strongly insisted upon, there can be little doubt as to the *raison d'être* of the article in question. Yet read between the lines, our contemporary's bark is worse than his bite, and all the bitter things said against disconnection resolve themselves into a wail for the non-ventilated condition of our sewers in general, whose only relief the *Builder* thinks can come through the timely aid afforded by our houses. While deploring the unwisdom of the general line of the article, doubtless, in a roundabout way, good will ensue. In anxiety to protect ourselves from the effect of sewer gas, the *fons et origo malorum*, the sewers themselves, their constructions and conditions have been overlooked or considered as beyond redemption. The truth is that if only main sewers were scientifically constructed and simply ventilated, sewer-gas would be almost unknown, for stagnation and consequent decomposition are father and mother of sewer gas and its concomitant grim products. Nevertheless for evident natural pneumatic reasons, it is imperative but that, however well ventilated and constructed sewers may be, the disconnection between houses and sewers and drains should be *sine quâ non*. Whatever may be the final result of Mr. Banner's claim to a monopoly in perfect ventilation, there is no doubt but that to his claims and pretensions we owe the fact that the ventilating world has been turned upside down.



## ADVERSARIA HIBERNICA,

## LITERARY AND TECHNICAL.

At a period when science had but few votaries in this country, or indeed in other countries, the name of Richard Kirwan, the Irish mineralogist, was known all over Europe. His once famous "Elements of Mineralogy," now little known or quoted, was a text-book; among his friends and correspondents were several of the most distinguished men of science in Europe, and at home the Royal Irish Academy—then in its infancy—was dignified by his membership. Science of every kind has made great strides since Kirwan's time, and mineralogy and geology have expanded in their foundations and elevations, high, far, and wide. To Kirwan, however, much credit is due, for he was an industrious pioneer and worker in days when indolence, doubt, and darkness were abroad.

In the light of present-day text-books and manuals on mineralogy and the fascinating science of geology, it will be instructive to the student to peep into Kirwan's "Elements," and draw conclusions. We have before us an early edition—"London: printed for P. Elmsley, in the Strand, MDCCCLXXIV."—two years after the formation of the Irish Parliament, and two years before the incorporation of the Royal Irish Academy. The state of scientific opinion at that time may be partly gauged from what Kirwan says in the preface to his book, a portion of which we will cite here:—"When we consider the degree of excellence which many of the practical arts busied in the treatment of minerals have reached in England, and also that in the merely speculative sciences, we are at least on a level with our neighbours on the Continent, it cannot but be a matter of surprise that, with respect to mineralogy, the parent of these arts, they should stand confessedly superior to us. That this inferiority on our side does not originate in any want of ingenuity in our artists, evidently appears by the masterly productions of a Parker and a Wedgewood. The true cause lies deeper. Mineralogy is an art whose cultivation and improvement require both speculation and practice: the mere theorist will never descend into laborious details of the practical part, without due encouragement or a degree of enthusiasm, in a country devoted to politics rarely to be met with, and the practical artist seldom possesses those general principles of science and extensive acquaintance with the discoveries of his contemporaries that are indispensably requisite to establish him on a footing of equality with them. On the Continent mineralogy is on a very different footing. In Sweden and Germany it is considered as a branch of science worthy of the attention of government. There are colleges in which it is regularly taught; it forms a distinct and honourable profession, like that of the soldier, the merchant, or the barrister; its superior officers form a part of the administration of the State; young students fraught with the knowledge to be acquired in their own country are sent abroad to glean all that can be collected from a more diversified view of nature or a more improved practice of the arts. This example has been lately followed by the French, the Russians, and even the Spaniards."

Kirwan proceeds to notice that at the time of his writing the French had established a mineralogical school at Paris, to which a considerable pension had been annexed, and that "subterranean maps of the whole kingdom are now tracing, and mineralogical voyages are from time to time undertaken at the public expense." He also alludes to chemistry as the parent of mineralogy, being cultivated by the most enlightened nations of Europe at that time, particularly in France, where it was studied with a degree of ardour approaching enthusiasm not only by those of the middle classes, but by some of the highest ranks of society. Kirwan laments that in England, on the contrary—a country far

richer than France in mineral products,—the branches of science spoken of receive no encouragement from the public, and none apply to it, except gentlemen in the medical line, whose transient attention is soon diverted by their more direct occupations. He points out the obvious consequences—the gross blunders committed in the working of mines in the British Islands, and in the extracting of ores,—and that learned foreigners were prone to remark that, were it not for their superior excellence and the cheapness of fuel with us, their extraction would be infallibly attended with loss, as many useful substances were daily rejected as useless.

These remarks of Kirwan nigh a century since were true in substance and true in fact, and the waste of valuable substances continues down to our own time, though not to nearly as great an extent as formerly. The study of chemistry has been the means of effecting a great saving in various directions, and several new branches of manufacture are now engaged in utilising what was formerly looked upon as waste. Kirwan himself, by his labours, caused many reforms in different branches of the industrial arts, and particularly in bleaching processes.

Further on in his preface Kirwan writes some words which we shall produce here, for since his day, identical language has been used over and over again by other writers who followed in his footsteps, without acknowledging their indebtedness. "Mineralogy must therefore, on the whole, be considered as a branch of chymistry, and its progress, like that of other branches of science, has been for many ages scarce sensible. In the earliest times of which we have any history, mankind seemed to have been of the same turn of thinking as the less enlightened and civilized nations of our own age. Satisfied with such information as casual experience threw in their way, they regarded the occupation of consulting nature by experiment as a childish and useless amusement, and neglected forming any theory; but in succeeding times the generalizing spirit of Aristotelic Metaphysics extending itself to natural philosophy soon suggested the notion of one common matter being the substratum of all vegetable, animal, and mineral substances, discriminated only by particular forms, which in the two former were held to be substantial, and in the latter purely accidental. From this ungrounded opinion (to which, however, some of the greatest men in the last century were much attached) that of the transmutability of metals into each other naturally arose, and to this notion, and some other equally false, the progress of mineralogy and every other branch of chymistry is undoubtedly owing. To accomplish their favourite purpose, experiments were multiplied without end; by means of these arts of dying, pottery, glass-making, and metallurgy were insensibly improved."

The science of mineralogy, despite the labours of many able men, is still in an unsatisfactory state, as mineralogists are not agreed as to a system of simple classification. Discoverers are every other year adding new names, and minerals or varieties are being called names given to them by those persons—sometimes that of their own name, and at other times the name of some distinguished individual is adopted. We have the manuals of Dana, Nicol, and Phillips, all worthy of perusal, but the former is considered the most simple.

The study of mineralogy is impeded by the confusion consequent on a variety of names for the same mineral. The student of the present day has large facilities for study by the existence of several general and local museums. In London the British Museum and Museum of Economic Geology afford good opportunities for investigation; and in Dublin there are collections of minerals in the Museum of the Royal Dublin Society. Mineralogy or geology in combination may also be studied to some extent in this city by the specimens of building and ornamental stones in the Royal College of Science, St. Stephen's-green, and also in the antiquities

preserved and on view in the rooms of the Royal Irish Academy.

Geology as a distinct science and study received but little attention in Kirwan's day; yet we find that distinguished mineralogist devoting one of the appendices to his work to some "Geological Observations" on the antiquity and origin of mountains, their formation and composition, &c. Speaking of mountains of the granite kind, he writes:—"That the formation of these mountains preceded that of vegetables and animals, is justly inferred from their containing no organic remains, either in the form of petrification or impression, from their bulk, extension, and connection, which seem too considerable to be ascribed to subsequent causes; and from their use and necessity for the production of rivers, without which it is hard to suppose the world had existed at any period since the creation of animals. Most naturalists are at present agreed that granites were formed by crystallization. This operation probably took place after the formation of the atmosphere (which in the history of the Creation is called the firmament), and the gradual excavation of the bed of the ocean, soon after which, it is said, that by the command of God (that is by the virtue of the laws of nature which He established), *the dry land appeared*; for by means of the evaporation of part of the waters into the atmosphere, and the gradual retreat of the remainder, its various species of earths before dissolved or diffused through this mighty mass, were disposed to coalesce; and among these the siliceous must have been first, as they are the least soluble; but as they have an affinity to other earths with which they were mixed, some of those must also have united with them in various proportions, and thus have formed in distinct masses the feld-spar, shoerl, and mica which compose the granite. Calcareous earth enters very sparingly into the composition of this stone, but it is found in shoerl, which is frequently a component part of granite; it follows that it must be one of the primitive earths, and not entirely derived from marine *exuvia*, as many imagine. Quartz can never be supposed to be a product of fire, for in a very low heat it bursts, cracks, and loses its transparency; and in the highest we can produce, it is infusible, so that in every essential point it is totally unlike glass, to which some have compared it. As granite contains earths of every genius, we may conclude that all the simple earths are coeval with the Creation. This observation does not preclude further researches into their composition; for, though water undoubtedly dates from the Creation, yet some late experiments show it to be a compound; their simplicity may be only relative to the present state of our knowledge."

Thus shrewdly and intelligently wrote Kirwan in the last century, and his observations were in advance of his time. Although it was at one period generally supposed that granite was the oldest of rocks, yet in some districts we have it demonstrated that the granite is more recent than the carboniferous period. Granite rocks of great antiquity exist in Scandinavia, in the Highlands of Scotland, and in Ireland in the counties of Donegal and Galway. All of these are stated to be older than the Devonian, and some than the Upper Silurian periods.

Professor Hull, the Director of the Geological Survey of Ireland, in his "Building and Ornamental Stones," speaking of the mode of formation of granite, observes that its igneous origin was first demonstrated by Hutton, from actual observation. But while all physical geologists are agreed that granite has resulted from a state of igneous fusion in presence of vapour and water, it has been demonstrated, he says, by Professor Haughton, that there are two great classes under which all granites may be arranged—metamorphic and eruptive. There are also certain specialities of structure and composition belonging to each of these classes observed by Professor Haughton. There have been



numerous analyses of granite made. Professor Hull quotes thirteen examples, in which the predominant constituent is silica, and the next in importance alumina. He states that the relative proportions of potash and soda are also features of importance, because in the soda granites the orthoclase is replaced or accompanied by albite; and he instances the granite of the Mourne Mountains, county Down.

A few words more about Richard Kirwan himself. Considered in the light of his time he was certainly a distinguished and able mineralogist and chemical philosopher, and his labours as a pioneer-worker in the fields of science should not be forgotten by his countrymen. He received his education in the Jesuit College of St. Omer, and shortly after leaving that establishment he inherited his family estate. His life henceforth was devoted to science. He was elected a Fellow of the Royal Society in 1780, and was subsequently the President of the Royal Irish Academy. Nearly all the learned societies of Europe elected him a member of their bodies. His works and essays were many, and there are several papers of his in the early transactions of the Royal Irish Academy, besides his "Elements of Mineralogy." Among his chief works were—"An Essay on the Constitution of Acids;" "An Essay on the Analysis of Chemical Waters;" "Geological Essays." Richard Kirwan lived through stirring times, and witnessed many changes; but he took no part in political struggles, his soldiership being that of science. He was born about 1750, and died in 1812. H.

## LECTURES ON ARCHITECTURE.\*

(Continued from page 180.)

### DOMESTIC ARCHITECTURE, FOURTEENTH CENTURY.

THE habits at Mediæval dining-tables were significant of good fellowship rather than refinement. The wassail bowl went round for general use, and the food was taken in the fingers, and cut with the knife which each man carried with him. Knives and forks only came gradually into use, as wealth increased, and they then made their way downwards from the tables of the great, to those of the merchant and middle class. The great ewers with rose-water, with which we are familiar at city banquets, are the successors of those which were made in early times, and some of them are of considerable antiquity. The custom was not without its advantages, and indeed, necessity, considering the mode of eating which had been described.

In Eastern countries at the present time, the habits of the table are not unlike those of our Mediæval forefathers. Each guest dips his hand in the dish, and the ewer is handed round, although in the use of the latter there is one important difference, for, while the European may wash his hands in the dish, the more scrupulous Oriental will have water poured over him, and will not touch that which has been used, however slightly, by another person.

In the fourteenth century, to eat off the same board, and to drink out of the same cup, was considered a special honour conferred by the lord on his inferior. It shadowed forth the custom which still lingers amongst us, of the "loving cup," and of "taking wine" with each other, at table, the latter of which, as a sign of friendly hospitality, has only of late, and to the regret of many, come to be disused.

In some of the manuscripts of the period, we find interesting representations of the great dinners of the day. The lord on the dais, under his canopy, with his wife at his side, is surrounded by his guests, neighbours, and dependents. The high table, occupied on three sides only, is ornamented with costly plate. The chaplain is there to say

grace, and ask a blessing on the feast. Minstrels and troubadours are ready to contribute their efforts to soothe, please, or excite, when called upon; and last, though not least, the fool or jester was at hand, with his jokes and wit, often, it may be feared, of a questionable nature, to rouse the laughter and hearty mirth which we may suppose to have been characteristic of times which have handed down to us the name of our country, as "Merrye Englande."

The more private life of the nineteenth century does not favour these habits, but they are not altogether extinct at our public dinners, as, for example, the annual banquet of the Lord Mayor at the Guildhall, where many of the old customs are carefully maintained, having been handed down from generation to generation. One of them prescribes that the master of horse, or postilion, should always be at the right hand of the Lord Mayor, booted and spurred, with whip in hand, ready to conduct his master wherever State exigencies may require his presence.

The habit of dining together in a public manner was, as you are aware, common in the religious houses, and it naturally became the rule with other corporations, such as the great trade guilds, which were the foundation of our city companies. It was likewise the fashion of the Court, and the great nobles therefore followed suite. It is a distinctive trait of Gothic, as opposed to Latin civilisation. We found, as you may remember, no traces of it in our examination of Pompeian and Roman houses. In them, the dining-rooms or triclinia, were small, and even in the later times of the falling empire, the object of the Roman host was the fastidious and elegant enjoyment of the few, rather than a hospitality, extended to a numerous company, such as that which we have been describing.

It will readily be understood, from a consideration of the ordinary life of Mediæval times, why the hall was so important, architecturally, in our great houses, and we may have to notice by and by that the importance of the hall began to wane as the old system of hospitality came to be abandoned in favour of the more exclusive habits of modern days. The hall is now, as we know, an appendage only to the houses of the wealthy, and forms no longer a necessary and integral part of the structure.

In passing from the hall to examine the other portions of the domestic architecture of the fourteenth century manor-house, mansion, or palace, we naturally come first to the chapel, which was seldom far from the hall, and often connected with it by means of a passage or cloister. The architecture of the chapel was in accordance with the usual church-building designs of the time. The east window had usually three, and occasionally a greater number of lights, in contradistinction to the dual arrangement, typical of domestic work. The altar was placed beneath the window. It was commonly of stone, and was sometimes formed of a projecting shelf of that material, and furnished with hangings. The usual arrangement of piscina, sedilia, and a receptacle for plate, are generally provided.

The lord's seat, or "pew," as it came afterwards to be called, is often on an upper floor, looking into the chapel from a higher level. Sometimes a screen divides the chapel into two parts, leaving the eastern space the whole height of the room, and dividing the western end into two heights, in which case the lower floor was used by the household, and the upper floor by the family. In important cases there existed an antechapel, over which the lord's pew was placed, and this arrangement lasted until a late period.

The chaplain was, we may be sure, an important person, responsible, to a great extent, for the manners and morals of the household. He was at hand to celebrate mass, to hear confession, to say grace, and even to read at meals, while in domestic matters, he was ready to take the burden from his lord's shoulders, until he became, in after-times, the half-dependent, half-boon-

companion, of whom Macaulay has drawn a not-too-flattering description.

The chapel was ordinarily a room in the house, though sometimes it occupied a wing, or tower, and more seldom was contained in a detached building in the quadrangle or courtyard. Attached to it were priests' chambers for the use of the chaplain, whether resident or otherwise. When there was no resident chaplain, the chapel was frequently served by a friar from a neighbouring monastery.

The parochial clergy looked with a certain jealousy on private chapels. They were at first a necessity, from the state of the country, and the distance apart from the parish churches, but as the latter came to be multiplied, the clergy attached to them not unnaturally wished to see the neighbours attend their own ministrations, and when application was made to the monasteries for clerical service, the old and never-dying jealousy between the regular and the parochial clergy, was ever ready to break out.

In the case of Crook Hall, Durham, the licence for the chapel still exists. It was issued by the bishop, and in order to maintain his power of control, it required renewal from year to year. Moreover, certain conditions were attached to the licence, and by them it was provided that the chapel was for private use only. The lord and his family were not to absent themselves from their parish church, but must attend the same, at least on the greater festivals, and on the day of dedication. All offerings were also to be made at the parish church, none being allowed in the private chapel of the hall.

The room over the western end of the chapel was often connected with the principal chamber. It had usually a fireplace, and could be cut off from the chapel by curtains, and in later times, by casements, so that it might be used for purposes unconnected with the chapel or with divine service. It has been called the Oriel, or Oriole, a name frequently mentioned in the records of the time, but as to the exact meaning of which some doubt has existed.

As we now find numerous fireplaces in domestic architecture, the chimneys naturally became an important feature in external effect. No great changes were introduced in the forms of the fireplaces themselves. They continue to be, as before, corbelled out from the walls, with projecting hoods above them, more or less ornamentally treated. Such fireplaces are found in private rooms, and in halls of moderate size. In the larger examples, the older fashion of a central fire was still followed, as has already been said. Externally, the greater frequency of chimneys led the builders to tax their ingenuity as to their forms. The older shapes of square or cylindrical shafts became more varied and complicated, and chimneys were grouped together, carved, moulded, or otherwise ornamented. Where they were carried up singly, they were frequently made octagonal on plan, and were finished in the upper part with gables, battlements, and conical tops. In some cases carving was freely introduced, and the chimney became an important architectural detail, and continued to be so until Elizabethan days.

At present chimneys are one of the architect's greatest difficulties in large towns, as from the way in which buildings of different heights are crowded together, and from the general use of coal, the disposal of the smoke is often a problem not easy to solve, while its effect on our architecture is deplorable. Our ancestors appear to have been free from these troubles, and their records do not, so far as I am aware, contain any mention of the profession of chimney doctors.

As fireplaces were now common, the chambers had an amount of comfort not previously attained, and the bed-rooms in particular were much improved both in structure and furniture. As to the latter, beds and canopies were provided, and even baths. In rare cases carpets for the floor began to appear, and there was a great advance in elegance and luxury. As a consequence, probably, of

\* By Professor Barry. Fourth lecture. Delivered at the Royal Academy on Thursday, March 15th.





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O'NEILL AND BYRNE ARCHITECTS

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these changes, iron bars and bolts were found necessary for the protection of doors and windows, and many of these articles are very elaborate and beautiful; as, for example, the foliated hinges, often covering the whole surface of the door, which it thus protected and ornamented at the same time. Complicated and well-designed locks and bolts were also added, and in these things, and in grilles for windows, the English workmen showed great talent and skill.

While the family rooms were gaining in importance, the domestic offices naturally became sharers in the current improvements. In the tower-like houses the offices were either included in the central building, or provided for in wooden sheds, which could be abandoned on the approach of an enemy. In the more ordinary type of building, however, the kitchen, surrounded by its necessary adjuncts, was a separate structure, and formed one, or even two, sides of the quadrangle. The offices were necessarily extensive, for there were no purveyors to bring food to the door, and everything was provided from the estate. Corn had to be ground and made into bread; meat to be killed as well as cooked; and farm-yards, stables, pigstyes, &c., had all to be arranged.

The famous abbot's kitchen at Glastonbury will give you an idea of the spaciousness, and even of the architectural magnificence, which the Mediæval kitchen could assume; and the abbot's kitchen at Durham is little inferior to it, and is of an earlier date. In the latter example the fireplaces are placed round the walls of the interior, which is octagonal on plan, and groined with stone. There is a central opening in the roof for ventilation. In large houses there were two or more kitchens, as there were also great and small halls, and in cases of exceptional magnificence of hospitality, the kitchens were supplemented by temporary structures, and even by cooking in the open air. In connexion with the kitchen were the buttery and pantry, generally near to the hall, as may be seen in examples at Oxford, Cambridge, and elsewhere.

The principal domestic arrangements having now been glanced at, it only remains to point out the changes which had arisen in the architecture of the period, some of which have been already indicated. These changes, as I have before explained, apply more or less to all buildings. The separation of domestic and church architecture is a modern device, and belongs to an unprogressive age in architecture. In Mediæval times no one doubted the excellence of the style of the day, and, as a consequence, there was no hesitation in applying it to all buildings, whatever their purpose. Let us see, therefore, what were the chief characteristics of the architecture of the fourteenth century.

Although it is convenient to retain the names which Rickman and others have adopted for the differing styles of Gothic in this country, we must admit that the title of Decorated is somewhat misleading. It may, perhaps, admit of some justification if we consider isolated details, but as regards architectural decoration, whether of the mass, or of the ornaments of a building, there was little to add to the perfection of many of the monuments of the preceding century, as you may see in the cases of Salisbury and Lincoln, to which I have before referred. Moreover, if surface decoration be considered, we find admirable examples in earlier times, in the richly-carved Norman doorways. In such cases, the execution is rude, and the architect relied for effect on the decorated aspect of the mass, with its concentric rings of enriched mouldings.

Closely allied with the Byzantine, and the Continental Romanesque schools, these elaborate doorways foreshadow the principle on which the architects of successive centuries worked, more especially in France, where the passion for deeply-recessed and highly-ornamented portals was always more strongly pronounced than in our own country. With us such doorways were perhaps at their best,

in the fourteenth century. The jambs were ornamented with numerous shafts, having carved capitals, and well-moulded bases, while the mouldings above were beautifully carved, the sculpture being in many respects more imitative of nature, and natural objects, than it had been in Early English examples. There was, however, little of that direct imitation of such things, which some extol as the perfection of art, and desire to see in our works of to-day; for the Mediæval architects knew too well that architecture is a conventional art, to fall into such snares.

We have seen that in the thirteenth century the dogtooth ornament may serve as a distinguishing mark, and we now find a similar test detail in the ball-flower, used freely in what is called Decorated work. We find it in arches, cornices, corbels, and windows, either in its simplest form, or highly enriched, and with connecting stems or bands of foliage. In the great examples of French doorways, the love of detail has perhaps somewhat overpowered that law of common sense to which architecture must bow, for when we approach one of them, as, for example, the western doorways of Rheims or Amiens cathedrals, it is found that the exceeding richness, which captivates at a distance, is to a great extent due to the introduction of niches, figures, and canopies following the curve of the arch, an arrangement apt to cause uncomfortable reflections, as to what may possibly happen to figures, placed in such a position of unstable equilibrium.

We have examples of this mode of decoration at home, but in most cases, with us, the niches and figures are on a smaller scale than in the French examples, and are suggestive rather of a moulding enriched, than of any constructional difficulty, or extravagance.

In tracing the variations of Mediæval styles, we do not expect to find any startling novelties; the workmen knew but one manner of working, and though a gradual change or improvement grew up, as it were, under their hands, they were not troubled by any outcry for a new style. It thus happens that in decorated work, the general forms of arches and doorways are little altered from those which were previously adopted, and it is chiefly in details that any change became felt. At first the dogtooth was used in connection with the ball-flower, afterwards it gave way to a carved flower or patera of four leaves, based evidently on the old design. The mouldings became, at the same time, bolder in section and of larger size, while retaining much of the general character of the preceding style.

The columns, which in small and unimportant works are octagonal on plan, continued in the cathedrals and great churches to be designed in clusters; but the shafts of such clustered columns were more essentially a part of the structure than had been formerly the case. Thus, in some fine examples, as at Exeter Cathedral, the effect of the pier with its clustered shafts is that of one massive column, enriched by vertical mouldings; while in the choir at Westminster Abbey, on the other hand, we see separate shafts gathered around a large central column, which latter is obviously the support relied upon to sustain the superstructure.

There is little doubt, I think, that the fourteenth century manner is that which is most consonant with sound principles. However beautiful the clusters of separate columns may be, in themselves, there is an anomaly in dividing vertically a pier which has to support a great weight, and there is a further constructional disadvantage in building such a pier of different materials, as marble and stone, which vary in their hardness, and power to support superincumbent weight.

In the piers which were in use in the Decorated period, this feeling would seem to have had its weight, as the cases of applied columns were rare, with exceptions, in the case of such details as wall arcades, and the shafts were, as a rule, an integral part of the

structure, and worked out of the same stone as the mouldings. We miss also the free application of the single shaft, as seen, for example, in windows such as those at the Temple Church, London, where the inner arches of the windows are carried on single shafts.

In the Decorated window the shaft was reduced in importance, and became, as in the case of the piers, a part of the actual construction. Not that it disappeared, although many windows were designed without it. The shaft, with its capital and base, was too beautiful a detail to be readily laid aside, and we consequently find that it was abundantly employed in piers, mullions, jambs, and niches, subject in most cases to the modifications to which I have referred.

I have already noticed the development of windows and window tracery; but a few words of further reference to this subject may perhaps be useful. A powerful influence on this development was found in the improvement of the manufacture of glass, and the consequent introduction of coloured windows. How powerful this influence became we may see by the examples of the great churches of France, the country which took the lead in the matter. Here, we find the windows growing in size and numbers, until solidity of construction appeared to be seriously jeopardised. Exaggerated clear-stories became masses of painted glass, with scanty divisions of stone bars, and stability was provided for, not always satisfactorily, by the hidden expedients of buttresses, flying and otherwise.

In England, our architects steered clear, for the most part, of this exaggeration, although we are not without examples of the application of the same ideas, as at Gloucester Cathedral in the great east window, which, however, belongs to a later date than that which we have now under review.

The Decorated windows were features of great importance in the architecture of the time. Beginning with the simple arches, trefoils, &c., inherited from the previous era, the window tracery became more elaborate, and gave opportunities for complicated design. This reached its climax in the flowing or Flamboyant style, which is probably the most ingenious manner of filling an arched window-opening that has ever been devised. This tracery has, however, the defect of appearing too clearly as constructed ornament, rather than ornamented construction, and there was ever a tendency to allow the fancy to run riot, and to set the dictates of good sense at defiance, by the adoption of forms remarkable rather for their quaintness and fantastic appearance, than for beauty of form and propriety of detail.

The well-known Jesse window at Dorchester, in Oxfordshire, is an illustration of my meaning in this respect. In it the constructional requirements are sacrificed to an exuberance of detail, which being placed against the light, is in an unfavourable position, and one, moreover, which is unnecessary, on artistic grounds, because the same story might have been told better by sculpture, applied in other parts of the building. For examples of flowing tracery of a more self-restrained description, I may refer you to the east window at Carlisle, and the great west window of York Minster.

While admitting the ingenuity and often beauty of such designs, I, for one, cannot but regard with greater admiration the noble simplicity and striking solidity of the lancet form, especially when enriched with the shafts and beautiful mouldings of Early English art. The recoil from the flowing lines of the great window-heads led directly to the introduction of the vertical lines, which marked the next period of so-called Perpendicular architecture.

I do not propose to trouble you, as I have said before, with all the minor details of differences between the styles, but I have, I hope, said enough to enable those of you who are not architects to distinguish between them. It only remains, therefore, to sum up the facts which we have ascertained to bear upon



the domestic architecture of the fourteenth century.

We find, in the first place, a considerable advance in the requirements of social life, leading, as a direct consequence, to an increased development of architecture. Such development was found to consist to a great extent in the addition of extra features to the time-honoured types, a mode of proceeding in strict accordance with the genius of the English people.

Further, it has appeared that, in early times, as at the present day, the country was the natural home of the English gentleman, who delighted to expend his resources there, in the improvement of his estate, and the exercise of a bounteous hospitality; rather than to crowd into cities, and to vie in magnificence with his foreign contemporaries. We have further concluded that our architecture was controlled by circumstances of position, by the materials attainable, by the state of the country as regards security, and by other similar external considerations.

Subject to these limitations, the architecture was reasonable, beauty was realised, but not at the expense of convenience, as then understood; and any object sought to be attained was attempted in the simplest and most natural way. It is our task, gentlemen, both of honour and difficulty, to seek to apply similar principles to the architecture of to-day.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

THE last effort of Victor and Sowden as managers of the Dublin theatre in the spring following, was the securing of Woodward for nine nights on shares. He opened on the 17th of May in *Marplot* and *Captain Flash*, and was received, as previously, with applause. On this occasion he had obtained leave from the manager of Drury-lane Theatre to perform in Dublin. His trip and short engagement proved remunerative to him. Indeed, considering the straitened resources of the Dublin managers at the time, the agreement proved highly and mutually advantageous to both parties. During his stay Woodward played *Captain Bobadil*, in "*Every Man in his Humour*"; *Scrub* and the *Apprentice*, *Atall*, in the "*Double Gallant*"; the *Copper Captain*, and *Petruchio*. By this short engagement Woodward cleared £200. On the departure of Woodward, and the close of the season, the curtain fell for the last time on the joint and brief management of the Dublin theatre under Victor and Sowden. They are credited with being men of character and probity, and tolerably conversant with directing the business of a theatre, but the responsibility of their position was too great for them, and they were only too glad to be afforded an opportunity of extricating themselves in as graceful a manner as they could, with some credit, and without a serious loss. A general desire was soon expressed on all sides that Sheridan should be re-called to the scene of his former triumphs and disasters. He had done much for the reform and the respectability of the Irish stage, and he had unjustly suffered in his efforts to uphold its dignity and his own. Prejudice and party feeling since Sheridan's forced departure had greatly abated, and everything was in favour of his welcome return. During his absence he had for some time entered into an arrangement with Rich, of Covent Garden, for a share in the profits on such nights as he should perform in the ensuing winter; and in pursuance he played a variety of characters with success and increased reputation, notwithstanding what some of his critics have written. At the time, however, when he was re-called to Dublin he had quit the stage for a short time, and was busily interesting himself in perfecting his favourite scheme of education.

As soon as the announcement was expressed that Sheridan should again undertake the management of the Dublin theatre, he has-

tened to obey the call. Money was soon raised, and the mortgage paid off, and Victor and Sowden cheerfully fell back into the ranks. The former felt happy in serving his old master in his former station of deputy manager and treasurer, and Sowden appeared also quite content to serve as a subaltern after reigning for two years in the character of a joint manager. As soon as Sheridan had made up his mind to undertake the duties of manager, he called upon Barry, in London, and made offers to him for the next season, assuring him of advantageous terms, and informing him that his chief business in returning to Ireland was to place the stage once more on a firm footing, and that he would not continue in it more than a year or two, and that it would be Barry's own fault if he did not find his position all that he desired. It appears, however, that Barry did not relish much the proposition, for his hopes were raised at the time by the promise some of his friends had made of building a new theatre for him in this city. Sheridan next offered to engage him on a certain salary, or, if he preferred, to admit him to a share of the profits for the ensuing season; but Barry still hesitated, though he showed some inclination of agreeing to one or other of the proposals, and promised Sheridan that he would in a few days let him know the result of his considerations. Days passed, but Barry neither called on nor communicated his determination to Sheridan in one way or another.

It was plain that Barry was buoyed up with his expectations, and was resolved to compete for the place of honour. He had conjured up a vision, and his restless spirit would not find content until he gave it an embodiment. Sheridan failing to conclude terms with Barry, immediately on his arrival in Dublin set about the work of re-establishment. The theatre and its belongings were all in a wrecked and bad condition. The workmen were employed to repair the building; and a Mr. Lewis, a scene painter, was engaged to prepare three or four sets of scenes. The wardrobe received needful additions, and in a few months matters were in readiness for an opening. Sheridan also exerted himself to procure the best available talent he could find. One of his engagements was an agreement with Lee, then an actor of some reputation, but whom he had never seen perform, for £400 for the season. Lee, though a respectable actor, and able to support a line of first characters with tolerable success, did not entirely answer the manager's expectations.

A far more heavy, and a far less profitable contract was made by Sheridan with two foreign dancers, then the rage—Signora Marenesi, and Signora Bugiana. To these birds of passage, then esteemed the best dancers in Europe, £1,000 were given. They scarcely could be worth more than half that sum in Dublin to Sheridan at the time; but they were foreign birds, the expansion of whose wings were desired, and that was enough for the "ladies of quality." Sheridan was no niggard in his salaries; indeed, considering the state of the Irish stage in his time, and its rather limited income, he perhaps erred on the side of paying larger salaries than he could well afford. His object, however, would seem to be a good one. He wished to encourage talent, and secure the best performers, and make it worth their while returning again. Many performers of merit were brought out by Sheridan on resuming his management. Amongst these were the two Misses Phillips, who continued to be well received for several years afterwards in tragedy and comedy; Glover, considered a good comedian at that time; Miss Wells, and others whose names are less known.

The opening night was on the 18th of October, 1756, the play being the comedy of the "*Busy Body*," King appearing as *Marplot*. King performed in a large and varied round of characters, and was a great favourite with the Dublin audience. Among his personations were—*Ranger*, the *Miser*, *Abel*

*Drugger*, *Duretete*, *Lord Laco*, *Tattle*, *Scrub*, *Trinculo*, *Ostric*, *Tom*, *Bayes*, *Fine Gentleman*, &c. There was a weak attempt on the first night under Sheridan's management to revive the spirit of former unhappy scenes. At the commencement of the second act some young bucks in the pit, seconded by a few more congenial disturbers in the gallery, called out, "*Apology! Apology!*" According to Hitchcock, "*Mr. Dexter*, who performed *Sir George Airy*, and who was remarkable for his modest behaviour, being on the stage at the time of this unexpected demand, was so confused, that unable to make an answer, he bowed, and retired to consult Mr. Victor, who happened to be behind the scenes at that time. Mr. Victor desired him to go on again directly, and if the demand was repeated, to acquaint the audience that Mr. Sheridan was really ill of a cold which confined him to his apartment, and that he did not doubt but when he was recovered, he would give them every satisfaction they desired." This explanation, according to our authority, was not sufficient for the disturbers; they further insisted upon Dexter going to Sheridan's house, which was adjoining the theatre, and bringing them a positive promise. Dexter left the stage and went with Victor to Sheridan, to acquaint him with the factious spirit that was being manifested. Recollecting past scenes, he, after some deliberation, agreed that Dexter should return and assure the audience (or rather, shall we say, the ill-bred disturbers) that when Mr. Sheridan was recovered, he would make an apology on the stage, and that public notice of it would be given in the bills and advertisements. On this message being delivered, it was received, we are told, with applause, and the performance proceeded without further interruption.

That Sheridan should be called upon by any of his countrymen to make an apology to those who were instrumental in embittering his life and destroying his property, was nothing short of scandal, and it is a stigma on our country to have to record it, even though the disturbers were a despicable faction. The event, however, illustrates the spirit of the times, and shows how far law and order were outraged, and how a knot of bullies could ride down rough-shod and with impunity human manly feeling and public right. The law was powerless, and so were the administrators of it, through supineness or imbecility, that such a state of things could not be otherwise possible in the centre of the city.

To make a public apology on the boards of his own theatre must have been a sad trial for Sheridan, but it was made, and in such a way as must have brought a blush to the cheeks and a prick to the consciences and hearts of those possessed of the least gentlemanly feeling. We will let Hitchcock tell how the apology was made and received, and his reflections thereon:—"Too much affected to deliver this apology on a night in which he had a character to play, he advertised it previous to the comedy of the "*Suspicious Husband*," October 12th, 1756. The theatre was early crowded to behold the unmanly triumph of despotism over reason and justice. Such a spectacle was, perhaps, never presented to the public before or since. A manager who deserved a statue raised to perpetuate the memory of the good he had done, obliged to appear like a criminal before that tribunal which he had so often furnished with the most noble and rational entertainment! But he was equal to this arduous task. When the curtain drew up he advanced to the front of the stage, with a paper in his hand, fearing in the confusion which must unavoidably attend him to trust entirely to his memory. It was the universal opinion of the best judges who were spectators of this trying moment, that no man within their observation ever appeared before the public with more propriety. Tears gushed from the eyes of several of his male auditors. As soon as his speech—which was modest, expressive, and concise—was concluded, the loudest acclamations succeeded. So powerful is truth, that not a heart but participated his

\* See ante.



distresses. Reiterated plaudits spoke their sensations, which, continuing as he was retiring, he advanced again, and, with broken, faltering accents, spoke as follows:—Your goodness to me at this important crisis has so deeply affected me, that I want power to express myself; my future actions shall show my gratitude."

No wonder that the above spectacle should draw the following burst of indignation from Hitchcock, which we thoroughly endorse:—"If ever there was a moment peculiarly marked with disgrace to the feelings of a Dublin audience, it was on the present occasion, and posterity who read the page must blush at the degeneracy of the times, which could reduce a man of Mr. Sheridan's abilities and sentiments to the humiliating situation of apologising to the destroyers of his property, for their ruining his fortune, and demolishing the labours of so many years."

The storm passed, and theatrical management looked bright for a short while; but another storm was gathering, which was to burst, entailing eventually all the pain and penalties and sad outcome of a fierce and disastrous theatrical opposition.

## CORRESPONDENCE.

### ROOM VENTILATION.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—This important subject is engaging the attention of a great many, and several good ideas and plans have been put forward; but the following one is recommendable on account of its simplicity. I would propose that a slight vacancy be left over heads of door and window frames, this vacancy to extend—in doors, up at back of architrave heads, by leaving the plastering slack; and in windows, by leaving the vacancy over head of frame, soffit, and up at back of architrave head. This arrangement, which is very simple, will not interfere with good workmanship, neither will it hurt the architectural design of any building. By adopting the above a current of pure air would be in continuous circulation, without causing a draught, or being in any way injurious to the occupants of the room.—Yours &c.,

EDWARD KEOGH.

Galway, June, 1877.

### CONDITIONS IN SPECIFICATIONS.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—It is usual for architects to preface their specifications with a formidable array of "preliminaries" or "general conditions," as they may respectively be termed; some such being admittedly desirable and essential, but others superfluous and (not unfrequently) ludicrous. I confess that in the earlier portion of my own professional career I fell into the common error of including irrelevant clauses; but, a recent perusal, with a fresh eye and more matured experience, of some of my own specifications written during a twenty-six years' practice, entitles me, I hope, to present to the notice of your more juvenile architect readers a few suggestions as to paragraphs which should be expunged from their preliminary "conditions," &c.

Now, one very favourite and, I must say, very pompous clause invariably inserted is, that "in case any difference of opinion should arise during the progress of the works, the decision of the architect is to be final, binding, and conclusive." This is ridiculous, would be arbitrary, and perfectly unsustainable either in law or equity. No architect can constitute himself—even with the consent of other parties—into an ultimate court of appeal, without going through expensive formalities of deed of submission, counsel and attorneys' services, rule of court, &c.; and it must be very obvious that legal occupation would soon begone in matters appertaining to building disputes, if it were otherwise. The lawyers are rather too fond of their gains to relinquish their rights and privileges to a "mere architect," when there would be the slightest chance of "grist to the mill"—in retainers and refreshers—finding its way to their own pockets. Assuming even that a building question does arise, and law ensues—let it be either in Queen's Bench, Common Pleas, or Exchequer—and the case (as in *Kempston v. Butler*, *Collins v. Jameson*, *Ingram* and *McWilliams v. Mooney*, and others subsequently) occupy the court

for a considerable period, and a verdict had and obtained, there are yet beyond that high court two courts of appeal higher again; so that really it is frivolous for an architect to do simultaneously the Chief Justiceship, the Lord Chancellorship, and Lord Justiceship, and the law lord of the highest tribunal in the land in his own person, in insisting on his decision being "final," &c. A very vexed question also, and one respecting which there is likewise a great parade in "General Conditions," is that of fines for non-completion of works within a stipulated period. True, it would be hard for a business man especially, and for others under certain circumstances, to embark in a contract with a builder to execute so-and-so according to plans and specifications (sometimes without any, unless the contents of the estimate), and not guard against an immoderate or unnecessary delay in such execution; and for that reason architects generally provide for fines of varying amounts to be imposed on the delinquents. I more than suspect, that fines so provided for are not retainable or deductible from contra accounts in a court of law if a builder should sturdily dispute the right of their being inflicted; but they, or an equivalent, would be recoverable in an action at law for damages for breach of contract; and if the builder should be no mark, what then? Some years ago, I remember hearing ex-Chief Justice Monahan say in course of a building case, that he would not recognise as legal, fines inflicted upon contractors by a clause in their specifications or agreements. Here, again, the law takes care of itself, and won't allow outsiders to deprive them by consent or otherwise of the nice little pickings which invariably result from building quibbles, crotchets, &c.; and there are few questions, excepting the sensational divorce or breach of promise, more profitable to lawyers than those in which builders and employers and architects are the chief actors. I think that it is also very objectionable for architects to insert in their specifications such a clause as "everything that is necessary is to be done, although not shown on the drawings or referred to in the specification." If "necessary," why not be "shown on the drawings, or be referred to in the specification?" Although I am far from believing that any specification could be perfect and unassailable by a person disposed "to pick holes" in it, still I think that both drawings and specification should at least refer to everything that is "necessary." Some architects provide against "underletting the work" without their approbation. I fail to see the force of this; nor should I care if a contractor responsible to my client and myself for any work in progress under my supervision were to sublet every department of such work, as long as he carried it out to my satisfaction. What else is procuring cut-stone work from quarry masters, or machine-made carpentry from T. and C. Martin, &c., or getting such houses as Brooks or Dockrell or Sibthorpe to do plumbing, fittings, painting, &c., but subletting such work? and what matters it to any architect who executes same, if properly done? Another usual clause is perfectly untenable, and it is that, "in case the works be not carried on with proper despatch so as to afford a reasonable probability of their being completed within the time specified, the architect is, upon giving notice, to be empowered to enter upon the works and remove the contractor and his workmen and their tools, and employ such other persons as he may think proper." This is sheer nonsense, and unfortunately I have practically experienced the utter inability of either architect or attorney on behalf of client to adopt any such course; for, once a builder signs his contract to execute certain works within a certain time, he becomes supreme master of the situation, verifying the old adage of "possession being nine points of the law"; and he has the undoubted legal right to hold such possession up to the stipulated date of expiration of his contract, even though he had not laid a brick or stirred a peg in the interim from the signing of same.

Reverting to the matter of "fines," I would suggest that where same are specified to be imposed in case of non-fulfilment, there ought also be provided a corresponding advantage to the builder for expedition, in the shape of a substantial premium for completing before his time.

JOHN J. LYONS, Architect, &c.

201 Great Brunswick-street.

[In the above letter, and in his former one published in our last issue on "Taxing Masters and Architects' Fees," Mr. Lyons raises some important points that require further discussion with a view to their speedy settlement. The law, or rather the administrators of the law, interfere most unjustly and unwarrantably in several matters with the rights and privileges of architects, and to such an extent as would not be tolerated by

the members of any other respectable profession. In these times every class is subject to the besom of reform, except the legal profession; and it cannot for a moment be allowed that, because judges, lawyers, and solicitors are under our present system found generally necessary in the administration of the law, the evils surrounding their practice, and the hardships that such practice inflicts on professional men and other suitors will continue much longer to be tamely borne without redress. The law, to be sure, is defective in many ways, and needs amendment; but judges and other legal administrators and agents go beyond the limits of their tether. Law is still so expensive, so vexatious, and uncertain in many directions, that honest men, sooner than risk an almost certain loss, surrender their rights, believing that the first loss is better than a double loss through law costs, loss of time, and a host of other annoyances. If the system of our law procedure and its administration is not speedily reformed, depend upon it, courts of arbitration will be established by different classes of the professional and trading public, for the protection of their interests. The "Ouzel Galley" has been found of service in Dublin, and similar councils may likely be established and improved upon for amicably adjusting the claims of persons of all classes, who at present fail to obtain a fair hearing, let alone justice, in our law courts, unless they have a deep and full purse to pay exorbitant fees, and a succession of retainers. The composition of our juries also calls for attention, for juries are at present empanelled to try cases full of technical difficulties, which it is impossible for them to understand, and the consequences are obvious.—Ed. I. B.]

### DUBLIN BUILDING TRADE MOVEMENT.

THE question respecting the working hours and mode of payment, and the alterations that are thought to be necessary, are now receiving attention at the hands of a number of our respectable and old-established builders. It is proposed that the building operatives should commence work at 8 a.m. (after breakfast), winter and summer, and be paid at the rate of 8d. per hour all through. This suggestion is worthy of consideration on the part of the men, for in many trades and callings outside the building branches the method has been adopted of beginning work after an early breakfast. The plan, we may remark, has been adopted to some extent in the printing trade, and we understand it has been found to work well. In Dublin for long years the practice was to commence work at 6 a.m., working till 9, and then taking three-quarters of an hour for breakfast—an hour in some instances, according to arrangement. The system in London and some other English cities and towns during late years has undergone some changes. The building workmen of course commence work before breakfast, but have a half-hour breakfast-time at 8 o'clock, and an hour for dinner at 12 o'clock—in some towns at 1 o'clock. We have always considered that the 2 o'clock dinner hour (from 2 till 3) was too late, and that the Dublin system was a bad division of the day. The Saturday half holiday is now general in London and other towns; and in London the building workmen, on Monday, do not commence work till a half hour later in the morning than on other days. We have no doubt but a kindly conference between the employers and the representatives of the workmen in Dublin would lead to a more satisfactory system in respect to the mode of payment and the hours of labour than at present obtains, as well as to a reform in other matters that tend to disputes.



### THE NEW ELECTRIC LIGHT.

THE results attained in several localities where the electric light has been introduced, have decided the authorities of Milan to introduce the system for lighting certain of the principal streets and avenues. The proposition emanates from three gentlemen, MM. Allegri, Emannelli, and Soli, and their proposition, after considerable deliberation on the part of a commission appointed to study the system, has received the approval of the city authorities. The city has, in consequence, voted a sum of 6,000 livres for the carrying out of a thoroughly practical test, which will be made at the famous Cathedral Place.

The chief difficulty which has hindered the utilization of electricity for the general purposes of illumination has been the want of a delicate mechanical arrangement for preserving the proper distance between the carbon points as they are consumed. To obviate this difficulty several ingenious devices have been invented and tried, but their success has not been sufficient to carry them beyond the experimental stage, and until now no efficient substitute has been discovered for the clockwork by which the consumption of the carbon points is followed up in the very limited practical application of the electric light. There is now, however, a reasonable prospect of electricity being made available for some of the purposes of ordinary lighting, and this by means of the invention of M. Paul Jablockhoff, a Russian military officer, who has demonstrated the feasibility of subdividing the electric current and of rendering it useful for the lighting up of buildings. M. Jablockhoff's invention having been described in the *Times* of the 4th of May last, we need here only briefly refer to its main points. It consists of an electrical machine as a primary producer, and from which a wire is led to a number of points—according to the power of the machine—at which the light is to be produced, the wire being returned from the last light in the series back to the machine, which is a magneto-electric machine producing alternating currents of positive and negative electricity. At each point where the light is produced is what M. Jablockhoff terms an electric candle. This consists of two strips of pencils of carbon, about 4 in. long, connected together, but at the same time insulated by a strip of a white compound, which the inventor calls "kaolin," that substance entering largely into its composition. The kaolin is a fusible substance, which consumes at the same rate as the carbon points. The continuity of the wire from the electric machine is broken at the bottom of each of the electric candles. The current of electricity passes up and through one carbon point, becomes utilized as light at the top, and passes down the other carbon point, and on to the next candle. For some time past this light has been in regular use in the workshop of M. Denayrouze in Paris, where the invention is being worked by a company. Its first public application was in the Marengo Hall, at the Magasin du Louvre, Paris, where eight of these electric lights are said to have efficiently replaced the 100 Argand gas burners by which the hall is usually lighted. The first trial of this electric light in England was made on Friday evening in the West India Docks, and it was made with a view of testing its applicability to the purpose of lighting up the docks, warehouses, and similar establishments in order that work may be carried on during the night when necessary. A large number of scientific gentlemen and others interested in the question were present upon the occasion. The proceedings commenced soon after nine p.m., with the lighting of four electric lamps in the court-yard at the entrance of the docks. The lamps were arranged at distances 45 ft. from each other in one direction, and 30 ft. in the other. The light of the electric candle in each lamp was subdued by being admitted through ground glass globes. The light was steady after the first few minutes, and that of one lamp was sufficient to enable small print to be easily read twenty yards away. The light was produced from one of the Alliance Company's (Paris) electro-magnetic machines, having 32 magnets of six plates each, and being driven by a small portable steam-engine. After burning for a quarter of an hour the electric lights were extinguished and four gas lamps, each having four of Bray's No. 6 burners, and four powerful reflectors, were lighted. The contrast was very marked, the gas burning with a dull yellow light which barely lighted the surrounding space. The visitors then proceeded to the top storey of one of the larger warehouses which was lighted with three of the electric candles placed at considerable distances apart, and in the windows of the buildings. The floor was about 120 ft. long by 65 ft. wide, and

the light was most efficient when not obstructed by the shadows of the visitors moving about. A portable electric light was next carried down into the hold of a large vessel, and its efficiency in that respect was fully demonstrated, as it was also by an electric light on the quay. By the aid of these lights properly arranged, the loading and unloading of ships could be carried on at night. As a final experiment a candle composed of pure kaolin with a copper wire run through its centre was ignited by the battery and burnt slowly away. It gave a bright light, and was intended to show the applicability of the pure kaolin to purposes where only moderate lights were wanted. The carbon points, on candles, will only burn for about an hour, but M. Jablockhoff arranges four of these candles in each lamp, and as one is consumed another is ignited by a simple switch arrangement, so that the continuity of the light is hardly broken. The whole of the experiments were highly satisfactory, and indicate an important advance in the utilization of the electric light—firstly, as regards the supersession of clockwork; and secondly, with respect to the divisibility of the stream of electricity which renders it possible to burn several lights with a single current

### AN URGENT REFORM—RE WEIGHTS AND MEASURES.

DURING the last month a document has been issued by an association formed for promoting an amendment in the law and its administration in respect to weights and measures. The object to be attained is to secure for the public, protection against fraud and negligence, while at the same time enabling the honest trader to carry on his business without being the victim of outrage or extortion. The statements made in the document alluded to are most important to our citizen traders; but as the reform advocated runs counter to the views of the majority of the members in our Corporation, the subject has not received the attention it deserves. We regret to find also that the majority of our city newspapers have given this important subject the go-bye, thus giving strength to a widely entertained opinion that the journals in question are too much interested in their commercial relations with the municipal body, to injure those interests by outspoken expressions. We have on several occasions not hesitated to speak strongly and plainly against acts of fraud by dishonest traders using fraudulent weights and measures, and endorsed the condign penalties inflicted upon them. On the other hand we must admit that the law and its administration *re* weights and measures is in a most unsatisfactory state, and grievous and flagrant wrong is often inflicted upon honest traders.

We do not think we could state the subject more clearly or fully than it has been stated in the document issued by the association, through their hon. sec., Mr. John McEvoy, and we have displaced other matter to make room for the principal portions of this important statement:—

"Within the Borough of Dublin the Lord Mayor as Clerk of the Markets, and his deputies, claim, under certain clauses of the Dublin Improvement Act, 1849, power to override the provisions of the Weights and Measures Act, 5 & 6 Wm. IV., cap. 63, and the Acts amending same. By no other municipal body in the United Kingdom is such a pretension set up; and with what consequent injustice can easily be seen. The Lord Mayor, as Clerk of the Markets, visits and detects, prosecutes and convicts, is policeman, prosecutor, and judge, all in one person; and, as if this was not enough, he, or the Corporation lawyers, claim for his judgment a finality denied to the highest tribunals in the land. This finality is certainly not intended by the Weights and Measures Act, which expressly grants the right of appeal from the convicting mayor or justice to the Recorder or Court of Quarter Sessions. The Lord Mayor's subordinates similarly take upon themselves to discharge the duties of offices which should be distinct and separate. As Deputy-Clerks of the Markets they claim the right to adjust the weights which they inspect as Inspectors of Weights and Measures, and then, as they are allowed to pocket the fees (which seem to be fixed by themselves), they can levy what contributions they please from the trader, while the public have no security that the work of adjustment is properly or at all performed—the inspector and the adjuster being one and the same person.

"In February, Lord Mayor Tarpey visited the salt stores of Messrs. Altman and Son, and found therein a weighing machine which, on examination, he pronounced incorrect. He thereupon directed his deputies to summon the offenders before himself. As Lord Mayor he sat and heard the case, and convicted in the highest penalty (£5) allowed by the Act, thereby branding the defendants as guilty of the grossest misconduct, if not fraud. Messrs. Altman gave notice of an appeal under the Weights and Measures Act; but when the case came on for hearing, two lawyers representing the Lord Mayor and Corporation appeared, to strive to oust the jurisdiction of the Recorder, and claim for the Lord Mayor, under a charter of Edward III., revived, as they alleged, by the Improvement Act of 1849, the strange privilege of judging in his own case without appeal. Fortunately the Recorder, although declining to decide the point, went into the case on merits, and arrived at conclusions opposite to those of the Lord Mayor, and found the case one of a very trivial character, one not even of wilful negligence; and, that as such, a caution or a nominal fine should have sufficed as a punishment.

The fees claimed and exacted by the Deputy-Clerks of the Markets in Dublin, taking the common kinds of weights (iron) for example, are as follow:—56lb., 1s.; 28lb., 10d.; 14lb., 8d.; 7lb., 6d.; 4lb., 6d.; 2lb. and under, 3d. each. In Kingstown similar fees are charged by the adjuster appointed by the Town Commissioners under a local Act of the year 1869. Those charges thus compare with what are made elsewhere. In Birmingham the Corporation have provided an office for adjusting weights and measures, but separate from their office for stamping, and carried on by different officers. Their charges are:—For adjusting, &c., 56lb., 4d.; 28lb., 3d.; 14lb., 2d.; 7lb. and under, 1d. For stamping, the fees prescribed by the 5 and 6 Wm. IV., chap. 63, viz:—For 56lb., 3d.; 28lb., 2d.; 14lb., 1d.; 7lb. to 1lb.  $\frac{1}{2}$ d., each set of weights under 1lb. 2d. Comparing a number of accounts furnished to Dublin traders with the Birmingham scale, it has been found that the extra impost exceeds 100 per cent., and that in case of the smaller weights, a Dublin shopkeeper would save by making the Dublin authorities a present of his old weights, and ordering instead a parcel of new weights stamped with the Corporation stamp from Birmingham, the charge for adjusting and stamping old weights in Dublin exceeding the cost of new weights properly stamped in Birmingham.

In Cork and Belfast the police are *ex-officio* inspectors of weights and measures, stamping without fee, under the Irish Weights and Measures Act—in force everywhere in Ireland, the Dublin police district excepted. In Belfast and Cork the Corporation provide an office for adjusting, the police attending to compare and stamp, free of charge. The Corporation charge for adjusting is:—For 56lb., 4d.; 28lb., 3d.; 14lb., 2d.; 7lb. and under 1d. each.

The excessive fees charged in Dublin are not, however, allowed to go into the Corporation fund. Everywhere but in Dublin the fees received by inspectors or adjusters go, as directed by the Weights and Measures Act, to the local authority; enough, in some places, as at Belfast, to pay the wages and other expenses of the office.

In the townships of Dublin (with the exception of Kingstown, where the charges are excessive), there is no provision made by the local authorities for testing, comparing, or adjusting weights and measures, beams or scales, and the traders complain that weights adjusted at the Dublin Corporation Office or by Dublin scalemakers, will be in a week or a few days after found to be incorrect by the Police, and the aggrieved trader is without a remedy—the adjuster not being responsible, and disputing, perhaps, the accuracy of the standards by which his work has been condemned."

We would refer our readers to the document of the association for further detailed information respecting the rational systems that are carried out in towns and cities in the sister kingdom, and it is certainly not too much to ask the Dublin Corporation to help in establishing a similar system in this city. We think the Dublin Weights and Measures Association is quite right in sustaining Messrs. Altman in their appeal; and other honest traders should assist the association in its object, which is one intended for their own benefit. Whilst we will be always ready to denounce fraud and extortion on the part of dishonest traders, we will be equally prompt to denounce injustice or extortion on the part of municipal or other officials. From what is stated above it must be acknowledged rank injustice is perpetrated with impunity, and that an urgent reform is



called for in the law and its administration in respect to weights and measures in this city and throughout the provinces.

### THE PREMIER ON ARTISANS' DWELLINGS.

THE following remarks were made by the Earl of Beaconsfield on the opening of the new block of buildings in London, known as the "Victoria Dwellings for Artisans." The Premier's observations are worthy of consideration, and we hope the Government of the future will not only act up to the views expressed, but practically improve upon them, until the public health of the country is established on a sure, solid, and lasting foundation:—

The buildings with which we are immediately connected in feeling to-day did not originate absolutely from that act. They are the result of the sympathies and exertions of private individuals who wish to act in harmony with the legislation of which they approve. Their object is to increase the health of the people, and they knew that one of the greatest and most efficient means to increase the health of the people is to give them better dwellings. I need not impress upon you that the home is the unit of civilization. From it spring all those influences which give a character to society, either for good or for evil, either of a beneficent or of a disturbing character. The man who feels that his home is "Home, sweet Home" is proud of the community in which he dwells; but the man who feels that his home is a den of misery and crime immediately assails that society of which he believes he is the unjust victim. Now my hon. friend who has just addressed us, and who has given to this labour all the energy and experience and sagacity which distinguish him, has touched upon some of the statistics of the question. I refrain, as a general rule, on an occasion like the present from entering into statistics which are sometimes wearisome and not always clear, but the statistics in this case are so remarkable that I must for a moment advert to them, though I may limit my remarks almost to a sentence. My hon. friend has reminded us that actuaries with ample and adequate facts before them have come to the conclusion that the average death-rate in this city may be only 22 or 23 per 1,000; but, the fact is that if you go to St. Giles's, or any of those portions of the metropolis which are infamous for their insalubrity, you will find the death-rate then instantly risen from 40 to 60 per 1,000, and that alone is conclusive proof that if you are really anxious to increase and cherish the health of the people, you must strike at the great source of the disease among the people, and that is their insufficient and inadequate dwellings. Well, some experiments have already been made, and upon no mean scale, to effect this object, and therefore we can consider it with the advantage of experience. What is now ascertained to be the death-rate in buildings raised by other societies, but similar in character to those the opening of which we inaugurate by your assistance this day? The death-rate is only 14 in the 1,000, and I think these facts, which are indubitable, are results which ought to encourage you in the continued exertion which we have met this day to stimulate and celebrate. I have touched upon the health of the people, and I know there are many who believe—who look upon that as an amiable but a very philanthropic expectation to dwell upon. But the truth is, the matter is deeper than it appears on the surface. The health of the people is really the foundation upon which all their happiness and all their power as a State depends. It is quite possible for a kingdom to be inhabited by an able, active population. You may have skilled manufactures, and you may have a productive agriculture; the arts may flourish; architecture may cover your land with temples and palaces; you may have every material power to defend and support all these acquisitions; you may have arms of precision and fleets of fish torpedoes; but if the population of that country is stationary, or yearly diminishes,—if while it diminishes in numbers it diminishes also in stature and strength, that country is ultimately doomed. I am speaking to those who, I hope, are not ashamed to say that they are proud of the empire to which they belong, and which their ancestors created; and I recommend to them, by all the means in their power, to assist the movement that is now prevalent in this country for improving the condition of the people by ameliorating the dwellings in which they live. It is the health of the people, in my opinion, that is the first duty of a statesman. Impressed with that conviction I have endeavoured, however humbly, at all times to assist movements of this character, and

I am confident there is no object of higher importance to engage the interests of society. Her Majesty has commanded me to express her wish that her name may be associated with this institution, and that in future these buildings will be called the "Victoria Dwellings for Artisans."

Lord Beaconsfield then, amid loud and prolonged cheers, declared the buildings opened, and the announcement was followed by the hands playing "Home, sweet Home."

### THE ROYAL IRISH ACADEMY.

THE closing meeting of the Academy for Session 1876-77 took place on Monday evening last,

Sir ROBERT KANE, in the chair.

Dr. Ingram (acting secretary) read the minutes of last meeting of the Council, which contained a letter from Dr. E. P. Wright, resigning his position as secretary to the Academy, and passed a resolution by the Council expressing their recognition of the valuable services rendered to the Academy by him.

The President said that before proceeding with any other business it would be necessary to nominate a gentleman to succeed Dr. Wright.

The Rev. Dr. Reeves said he had witnessed with much gratification the faithful manner in which Dr. Wright had discharged his duties. He had always been most assiduous in his efforts to promote the interests and prosperity of the Academy, and in his labours his high scientific character and attainments had shown themselves and shed a certain amount of lustre upon all he had accomplished. He had to propose as his successor Dr. Robert Ball, the son of a man whose memory was held in high esteem by them all, and who had once filled the office of treasurer to the Academy. Dr. Ball had been serving on the Council for some time, and understood its working. His communications had always been marked by originality of observation and great research. His attainments were well known, and as Astronomer Royal he was widely known, and his zeal and abilities properly appreciated.

Dr. Hayden seconded the nomination, and said he considered it most fortunate for the Academy that they had a man of such eminent qualifications as Dr. Ball to succeed Dr. Wright.

There being no other candidate,

The President announced that although practically unanimous on the nomination, they would have to proceed to the ballot, according to rules.

Mr. William S. Baily, F.G.S., read a report "On Fossils of the Irish Coal Districts."

Mr. William Plunkett, F.C.S., read a paper, prepared by Dr. Studdert and himself, "On the Solid and Gaseous Constituents of the Spa at Mallow, Co. Cork." The analysis of the solid constituents showed principally silica, iron, sulphate of lime, carbonate of lime, carbonate of magnesia, and chloride of sodium.

A paper, prepared by Mr. A. N. McAlpine, B.S., and Mr. C. C. Hutchinson, "On the Gaseous Constituents of the Vartry and Royal Canal Waters," was read by the former. The result of the analyses showed the Vartry water to be as near as possible perfectly pure, while the Canal water was found to contain considerable organic impurities.

Professor Galloway read a paper, prepared by Mr. Reginald Lawrence and Mr. C. W. Reilly, "On the Albuminoid Matters, Alcohol, and Phosphates in the Burton Ales and in Dublin Porter." The results showed that the principal elements of nutrition were found in much larger quantities in the foreign and ordinary Dublin double stouts than in Burton ales.

Papers—by Mr. Thomas Bayley "On the Peroxides of Cobalt and Nickel," and "On the Volumetric Estimation of Chromium," and by Mr. Henry Hatfield, "On a new method for the Detection of Cadmium in the presence of Copper," were also read.

The scrutiny of the ballot having concluded,

The President declared Dr. Robert Ball, F.R.S., duly elected to the office of secretary.

Several donations were announced, including two silver medals of Thomas Moore, the poet; one from the College Historical Society, for composition in 1798; the other awarded to him while at the "Classical English school" of T. S. Malone, for "reading history," 1785. Also, his diploma as an honorary member of the Academy. These were presented by Mr. S. C. Hall, through Professor Barrett and the Rev. Chancellor Tisdall. Mr. R. H. Jephson presented a fine bronze celt.

### THUNDERSTORM.

A THUNDERSTORM, accompanied by vivid flashes of lightning and a terrific downpour of rain, broke over Maryborough on Tuesday, the 19th ult., and continued (says the *Leinster Express*) without interruption for some hours. The force of the rain was such that it tore up the surface of the streets, and in various places rendered them almost impassable for some time. So far as we could ascertain, no damage of moment resulted from the storm except in the case of the county gaol, the roof of the clock-tower of which was struck by lightning and broken. The principal injury was confined to the back portion of the roof, which was completely unslated, while the exposed timber-work ran a narrow risk of ignition. It was fortunate that no accident happened through the falling slates, though at the time some prisoners were in the yard, and other persons about. The governor's apartments were injured by the rain which descended through the roof; but the governor and his family are not occupying them at present. Very considerable injury was caused by the lightning at Mr. Campbell's residence, Clonreher. The wing of the house facing the castle consists of three rooms—a parlour, a bedroom, and another bedroom overhead. The lightning struck the upper room, it is presumed, by entering through the chimney, and continued its course in succession to the two rooms underneath. An idea of its destructiveness may be formed from the fact that a large firegrate in the upper room was broken into several pieces; while a mirror, which lay on a chest of drawers at the opposite end of the room, was broken into fragments, and the glass scattered about the floor. It is rather remarkable that the woodwork of the mirror could not be discovered anywhere, while all traces of the quicksilver had disappeared from the broken glass. In the middle room, the damage done by the lightning was equally extensive, the strangest part being that the lightning in its exit made a clean breach through the wall, struck against a metal spout conducting to a water-barrel, and killed on the spot a cat which had run under the barrel for protection from the rain. A pigeon on flight was also struck and killed, together with a duck and turkey; while three servants of Mr. Campbell, who happened to be in the stable at the moment, were suddenly thrown to the ground, though they fortunately escaped uninjured. In the parlour the damage done was even more extensive. A carpet was rendered almost valueless; a massive mahogany chair was twisted into a shapeless object, the gilt mouldings of the room were torn into atoms, and the wall paper adjoining stripped to the ceiling. At the Camp at the Heath the troops were unprepared for the sudden downpour of rain, so that in a few moments the tents were completely deluged both within and without. The precaution of digging trenches round the tents was not seen until too late; and as a consequence the bedding and articles of clothing were saturated right through. Many of the tents, we learn, could not be occupied at all during the night, and their occupants had to seek shelter in the Catholic church adjoining the Camp, which, owing to the circumstances of the situation, was thoughtfully placed at their disposal.



## INSTITUTION OF CIVIL ENGINEERS' LONDON.

THE Council have made the following awards for communications submitted during the past session:—

Watt Medals and Telford Premiums to—William Worby Beaumont, for "The Fracture of Railway Tires"; William Cawthorne Unwin, for "The Resistance of Boiler Flues to Collapse."

Telford Premiums to—Robinson Souttar, for "Street Tramways"; Isaac John Mann, for "The Testing of Portland Cement"; William Anderson, for "Experiments and Observations on the Emission of Heat by Hot-water Pipes"; John Baldry Redman, for "The River Thames"; Henry Robinson, for "The Transmission of Power to Distances"; Alexander MacDonnell, for "The Repairs and Renewals of Locomotives"; Richard Henry Brunton, for "The Japan Lights."

The Manby Premium to Charles Norman Bazalgette, Barrister-at-Law, for his Paper on "The Sewage Question."

The Council have likewise awarded the following prizes to students of the Institution:—

The Miller Scholarship to Percy Ruskin Allen, for "Machine Tools."

Miller Prizes have been awarded to each of the following:—Arthur Cameron Hurtzig, for "Submarine Foundations"; Charles Graham Smith, for "The South Reserve Floating Landing Stage and Piers at Birkenhead"; Richard John Gifford Read, for "Comparison of the Merits of Wrought-iron Plate and Trussed Girders for Single-span Railway Bridges"; Nicholas Watts, for "Mechanical Puddling in the Manufacture of Iron"; William James Chalk, for "On Waves, and on Structures designed to resist their Force"; John Charles Mackay, for "Engineering Explosives."

## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE presentation of the Royal Gold Medal and prizes took place at the last general ordinary meeting of the Institute, held during the late month, Professor Donaldson presiding through the earlier portion of the proceedings. There was a very full attendance. Professor Donaldson prefaced the presentation of the medal to the president (Mr. Charles Barry) by a most appreciative address, and the distinguished recipient replied to the honours in suitable terms. Before the presentation took place there was a ballot and election of one fellow and two associates.

Mr. Eastlake, the secretary, announced that in accordance with the new regulations for the admission of students to the library, the Council had issued tickets price 5s. each, admitting to the library any student of the architectural classes of the Royal Academy, or of King's and University Colleges, or any member of the Architectural Association. Mr. Eastlake also submitted the report of the Council as to the result of the Architectural Examination of 1877. The Council reported that in the Preliminary Class the following gentlemen had passed, viz., Messrs. R. E. Gruggen, H. Griffin, P. E. Ridge, J. Bilson, J. Shillecock, and C. J. Smith; that in the Class of Proficiency, Mr. F. Baggallay passed in both sections (viz., the artistic and scientific), Mr. R. W. Gibson in the artistic section, and Messrs. J. B. Gass, W. Jacques, and J. J. Lough, in the scientific section. The Council also reported that on the recommendation of the examiners, they had determined to award £10 of the Ashpitel Prize to Mr. J. J. Lough, as the candidate who had distinguished himself most creditably in one section of the Proficiency Class; £5 to Mr. J. Bilson, who had distinguished himself most creditably in the Preliminary Class; and £5 to Mr. F. Baggallay, who passed in both sections.

The president, who occupied the chair during the latter portion of the proceedings, presented the following medals and prizes:—

The Soane Medallion (for a Design for a Free Library and Institute) to Mr. William Scott. In the same competition, a Medal of Merit was awarded to Mr. L. Ball.

Sir William Tite's Prize.—A certificate of honourable mention, for a design for an Ambassador's Residence, submitted in competition for this prize, was awarded to Mr. Henry Tanner.

The Institute Medal and £5 5s., for measured drawings of Lavenham Church, Suffolk, were accorded to Mr. W. Gilbee Scott. In the same competition, a certificate of honourable mention (for drawings of Laon Cathedral) was accorded to Mr. W. S. Fraser, an American competitor, the president remarking that it was very gratifying that the prizes offered by or through the Institute should be striven for by students so far away.

The Institute Medal, for an essay on "Constructive Ironwork," to Mr. Hugh Stannus.

A Medal of Merit, for an essay on the "Chronicles of Early English Art," to Mr. C. L. Bell.

The Pugin Studentship, for the best set of drawings, to Mr. W. Talbot Brown. In the same competition, a Medal of Merit to Mr. G. W. Browne, and certificates of honourable mention to Mr. S. Vacher and Mr. W. H. Wood.

As the prize winners came forward to receive their rewards, they were severally addressed by the president in a few well-timed words of praise and encouragement.

After some other transactions were concluded, the adjourned discussion on Mr. Steveuson's paper, noticed in our last issue, was resumed, at the close of which the meeting terminated.

## PUBLIC STATUES IN LONDON.

A FEW days ago a return was issued of the number of public statues within the Metropolitan Police District which have been transferred to the charge of her Majesty's Commissioners of Works and Public Buildings, under the provisions of 17 and 18 Vic., cap. 33, sec. 7, or erected under sec. 2 since the passing of that Act, with a description of the places where such statues have been placed, and the date when they were transferred. They are as follow:—Richard Cœur de Leon, Old Palace-yard, 1861; Sir James M'Grigor, Chelsea Hospital grounds, 1865; Sir John Franklin, Carlton-terrace Gardens, 1866; Lord Herbert of Lea, Pall-mall, 1868; the Guards' Memorial, Waterloo-place, 1873; the Earl of Derby, Parliament-square, 1874; Viscount Palmerston, Parliament-square, 1877; Sir Robert Peel, Parliament-square, 1877. The statue of Dr. Jenner, now in Kensington Gardens, and the statue of Major-General Havelock, in Trafalgar-square, have for some years been maintained by the Commissioners of Works, although the forms of the Act 17 and 18 Vic., cap. 83, have not in the case of those statues been complied with.

## THE GROWTH OF AN ENGLISH TOWN.

AN article in the *Builder* of the 23rd ult. on the ancient state and present position of Stockton-on-Tees is highly instructive. We make a short extract:—

Having its origin involved in obscurity, Stockton yet dates back its history for centuries, and one of the most plausible of the conjectures in relation to its early history is that it belonged, about the days of the Conquest, to one of the Norman barons, who gave the manor house to the see of Durham, for in that manor house, for long, the early bishops of Durham lived in lordly state, and nearly six centuries ago it was rebuilt by Bishop Kellow. The manor house is supposed to have been fortified, and to have acquired the name of a castle, the degenerate remains of which have not long been removed. Its incorporation also is of doubtful date, but it extends back over five centuries. The town has its fairs, chartered by the bishops; it had its parks and pasture grounds, and it built, on some scale or other,

a ship, but from that day down to those of the restoration its trade fell, and it declined in importance. In 1660 it had, according to its annals, become so "poor a place" that the best house in it could hardly boast of anything better than clay walls and a thatched roof, and the whole town only contained one hundred and twenty houses, none of them built of brick, and many years after this even the mayor resided in a house with a thatched roof. It began to vend coals from the port, but the rate was one of ten chaldrons yearly; its castle was made untenable; and its manor sold for the use of parliament, and decay seemed to begin to set its effacing fingers on the town—one of its chief claims to remembrance during the seventeenth century being the persecutions it had to endure, and which were passively protested against and grimly recorded in Bessie's "Records of Sufferings." From the middle of the eighteenth century, the progress of the town became more rapid and more settled; and thus the population began to increase, and its trade to feel the impulse which better approaches to the town gave. Its position on a navigable river attracted to it shipments, the wide and fertile district around it began to make it their market, and thus its trading foundations were based. It may indicate in some degree the extent and the growth of the town if it be added, that at the present time its make of gas increases over last year at the rate of two million feet monthly; that one of the sets of works alone consumes 50 million gallons of water; that in its union are included 37,897 acres, and a population approaching 36,000; that its paupers number a thousand; and that its death-rate is often an excessive one.

The existence of Cleveland ironstone and of coal helped to make Stockton-on-Tees what it is to-day. Iron ship-building yards, blast furnaces, plating mills, and extensive engineering works, and others of a cognate character, are now in operation; and Stockton-on-Tees, it may be truly said, is a robust manufacturing town, solidly based on many industries. Her public and ecclesiastical buildings are noticeable, but the sanitary condition of the town calls for much improvement.

## WATER SUPPLY TO NORTH UNION WORKHOUSE.

MR. John Burke, Sackville-street, has been elected Poor Law Guardian for Mountjoy Ward by 386 proxies and 571 rated occupiers, giving a majority of 81 votes. This gentleman has a perfect knowledge of the evidence given by two eminent members of the medical profession in Dublin before the committees of both Houses of Parliament on the Vartry question. He recollects their condemnation of the Canal water as unfit for human use, and the skilful manner in which they demonstrated its impurity. His benevolent disposition, his pious reliance in the promise made in the Scriptures (Matt. x. 42), are so well known, a hope may be entertained, that he will make every exertion at the meetings of the guardians to induce them to discontinue taking the supply of water for the use of the inmates of the poorhouse, from the fag end of a branch of the canal, a well-known stagnant pool—"The Turf Harbour."—J. K.

## HOME AND FOREIGN NOTES.

ADULTERATED BUTTERMILK.—At the Belfast police court on Saturday, the Board of Superintendence of the County Antrim Gaol, Belfast, summoned Samuel Gibson Barron for supplying to the gaol buttermilk "not being of the quality, nature, and substance demanded by said complainants." Evidence having been given, the Bench imposed a fine of £5 and 20s. costs.

FIRE IN A TIMBER YARD.—On the night of Saturday, the 23rd ult., the extensive saw-mills and timber yard of Messrs. Meade and Son, Great Brunswick-street, were discovered to be on fire. There was an ample supply of water, and, through the exertions of the Fire Brigade under Captain Ingram, the fire was confined to the engine-house and fitters' loft. The damage is fully covered by insurance.

MUSICAL INSTRUMENT MANUFACTURE.—The *Musical World* says that the average annual value of musical instruments made in Paris during the last six years has been 23,000,000 francs, divided among 360 makers, employing no fewer than 5,000 workmen. Paris turns out every year 1,320,000 francs' worth of accordions. Pianos figure for 11,400,000 francs; organs for nearly five millions and a half; wind, wood, and metal instruments, for nearly four millions; but bowed instruments for less than half a million.



St. Mary's Church, Warrenpoint, Co. Down, was re-opened on the 17th ult., after extensive alterations and repairs. The old pews have been replaced by open benches of pitch pine varnished; by this arrangement additional sitting accommodation will be provided for nearly one hundred persons. A new pulpit and reading desk have been supplied, and the gallery has been newly fronted in pitch pine, in keeping with the other fittings of the church. The organ has been overhauled, and a new swell put to it. The space inside communion rails has been laid with encaustic tiles from Messrs. Maw and Co.'s works, Salop. We are informed by a correspondent that the contractors were Messrs. Wbeelan and Watson of Newry.

**THE CAXTON EXHIBITION.**—Although dated for the 1st, we publish on this occasion previous to that date. On this Saturday on the opening of the Exhibition his Grace the Archbishop of York will offer up a Dedication Prayer. Sir Charles Reed, LL.D., Chairman of the Executive, will give a brief History of the Exhibition. The Right Hon. W. E. Gladstone, M.P., will then formally declare the Exhibition open, and the company will adjourn to the Public Dejeuner in the Conservatory of the Royal Horticultural Society, at two o'clock, under the presidency of the Right Hon. W. E. Gladstone, M.P. In our next issue we will give an account of some of the exhibits and other matters in connection.

**THE DEATH OF SIR HENRY JAMES, R.E.**—At the ripe age of 74, at his residence in Southampton, on the 14th inst., passed away Lieutenant-General Sir Henry James, late Director of the Ordnance Survey of Great Britain. He entered the Royal Engineers, as a cadet, in 1825, and received the honour of knighthood in 1860. In 1844-6, he was director of the Geological Survey in Ireland, and in 1846-52, director of the Admiralty Engineering Works, at Portsmouth. In 1854 he was appointed director of the Ordnance Survey of Great Britain, a post which he held till his appointment to the command of a battalion in 1874. He was also head of the Topographical and Statistical Department of the War Office, till its disavowal from the Ordnance Survey, in May, 1870. Among other works the surveys of Jerusalem and Sania were carried out under his direction.

**PAPER HOUSES.**—A manufacturing company in Wisconsin keeps three mills constantly running on building-paper, having capacity for the making of sixteen tons per day. As long ago as 1857 the company began the manufacture of paper for building purposes. The paper is a thick, hard pasteboard, wound in rolls of 25 lb. to 100 lb. each, and usually 25 in. wide. While in process of manufacture it is subject to a pressure of hundreds of tons, which compresses the fibres together in one solid body, thus making an absolutely air-tight sheet; and as paper is one of the best non-conductors known, it resists the action of both heat and cold, and so a building lined with it is made warm in winter and cool in summer. It does not shrink like lumber, and is not affected by frost, cold, heat, or dampness; and it is known that it will not burn as readily as wood, on account of its hardness and solidity, and by its use a house can be almost, if not absolutely, tight.

**LOCOMOTIVES ON ROADS.**—Once more (says *Iron*) the question of road steam traffic is shelved, and the promoters thereof have to rest satisfied with a promise that the government will endeavour to evolve something to the satisfaction of all parties. The merits of the whole matter are sufficiently well known, and probably the supporters of the new bill felt this impression in the House of Commons on Wednesday night. Surely no eloquent advocacy is needed to promulgate the development of steam-power, or to refute the prejudiced who so well succeed the opponents of the railway system. In these days, too, one would imagine that mere bald assertion, when made so as to put the inventor and the engineer on their mettle, would be received merely as tests or suggestions, and not as judgments. Let there be certain reasonable and practical conditions laid down by experienced men, and let these succeed the declamations of interested individuals, and there will soon be a solution of the whole question. The government measure will be looked for with interest, for it is easy to see that there is more involved than merely the weight, smoke, and manipulation of the traction engines.

#### BOOKS RECEIVED.

"THE Builder's Clerk: a Guide to the Management of a Builder's Business" (London, Spon), contains some sound advice to those daily engaged in conducting a builder's office. The greater part of the matter has appeared in the columns of a contemporary, and we

think the author has done well in issuing his ideas in book form. That it will meet the requirements of those for whom it is intended, we have little doubt.

From Messrs. Spon we have also "Bye-Laws and Regulations with reference to House Drainage," &c., by Rogers Field, M. Inst. C.E. This pamphlet will bear a careful examination. We should be glad if the Uppingham system could be generally adopted for purposes of house drainage.

#### LAW.

##### ACTION FOR SURVEYOR'S FEES.

*McConnell v. Kilgallen.*—This was an action tried during the past week in the Second Queen's Bench, before Mr. Justice Barry and a special jury. It was brought by Mr. Henry McConnell, the well-known building surveyor, of Dublin and Belfast, against Mr. Charles Kilgallen, building contractor, for £142, amount of plaintiff's claim, as fees for quantities furnished in December last for a new Roman Catholic church, to be built at Castlebar, of which Mr. J. J. O'Callaghan was architect. Defendant's tender was accepted, but he did not proceed with the work for the reason, as alleged, that he found plaintiff's quantities incorrect. Several professional and other witnesses were examined on both sides, and after a two days' hearing the jury returned a verdict for plaintiff for £132 1s.

We have on another page in present issue alluded to the necessity of having cases of this nature settled by some other tribunal than a court of law. We are of opinion that not one out of the "Special Jury" empanelled, and who had listened to the technical jargon used, and the blunderings of the long robed gentlemen, was a whit wiser as to the main question in dispute, even after being directed by the learned judge to find for the plaintiff.

#### TENDERS.

In Farm Offices at Kyle Court, County Wexford, for T. H. Revington, Esq. Mr. W. Fogerty, Architect, Dublin:—

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#### TO CORRESPONDENTS.

**THE CAXTON CELEBRATION.**—We present our readers in this issue the first portion of a historical sketch of the rise and progress of printing and publishing in Ireland. The sketch is not an exhaustive one, being rather a comprehensive outline of the subject; but being *apropos* to the occasion, we hope it will be found interesting. Unfortunately as regards Ireland, materials are scant for a full and proper account of the rise and early progress of the art of printing in this island.

**ASSISTANT ARCHITECT.**—Our columns will be willingly opened to you for a fuller ventilation of the subject mentioned.

**A PROVINCIAL BUILDER.**—The question is touched upon in present issue.

**C. E.**—We advocated such a union on more than one occasion, and we do not see any unsurmountable obstacles in the way if both parties were agreed.

**RECEIVED.**—J. P.—R. A.—A. S. (Glasgow).—M. (London).—A Chip.—J. D.—Eblana.—W. C., &c.

#### NOTICE.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

Correspondents should send their names and addresses, not necessarily for publication.

It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.

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#### Illustration.

CHURCH OF ST. PATRICK, DUNGIVEN, DIOCESE OF DERRY.

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
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## Illustration.

VIEW OF CHAPEL OF OUR LADY OF LOURDES,  
CARMELITE CHURCH, DUBLIN.

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## THE IRISH BUILDER.

VOL. XIX.—No. 422.

## PUBLIC WORKS IN IRELAND.\*

## FIRST NOTICE.

**A**RCHÆOLOGISTS and antiquaries, as well as architects and landed proprietors, and agricultural labourers as well as artisans, may now peruse the yearly reports of the Commissioners of Public Works in Ireland with growing interest. The Forty-Fifth contains much that will enlighten the speculative capitalist, the humble but needy improver, and the politician of all shades. The operations of the Board *re* loans, sanctions, advances, repayments on the heads of works of drainage, land improvement, labourers' dwellings, and other kindred matters, as well as public works in particular under the management of the Board, are detailed, and further and particularly in the several appendices. Among the latter, Mr. T. N. Deane continues his interesting report on National Monuments and Ecclesiastical Ruins, accompanied, as previously, with a number of explanatory drawings. To this report we will further on give such attention as it deserves.

Numerous applications for loans have been made to the Board, from the 1st of April, 1876, to the 31st of March in this year, for improvement purposes, under the Public Health (Ireland) Act, on the part of sanitary authorities, including town commissioners, boards of guardians, and corporations. Among the number of those sanctioned of a local kind in connection with the district of Dublin, we find £300 for the North Dublin Union guardians, for a supply of water to the Drumcondra district; and the sum of £4,841 to the Township Commissioners of Dalkey, for sewerage and other works. A much larger sum was, however, needed by Dalkey than was sanctioned, but we suppose its commissioners will raise it in other quarters.

Among the applications under the act of 1 and 2 William IV., we find the Dublin Port

and Docks Board down for £130,000, "to alter or re-build Carlisle Bridge, and to build a new opening bridge lower down the Liffey, under the Local Act 39, 40 Vic.," &c.

Among the applications not within the Board's power of lending, or not recommended, we find the Clontarf Township Commissioners, who seek £1,000 for the general purposes of the township, and for repayment of a loan; and the Corporation of Dublin, who asked for £1,000 "for preliminary expenses in preparing an improvement scheme under Artisans and Labourers' Dwellings Improvement Act, 1876." Our Corporation are adepts in laying out money in preliminary expenses.

The total sanctions were £450,042, as against £449,826 in the previous year, showing a steady increase in loan operations, each year giving an excess of £120,000 over the transactions of 1874. The above sums were for a variety of purposes—improvements in towns, labourers' dwellings, sanitary wants, drainage, land improvement, teachers' residences, purchase of farms by tenants, and sundry similar purposes. The number of new loans made was 450, as against 145 closed in the same period. The sanctions of the year included £5,105 for repairs of the Blackrock road.

The amount of money applied for and allocated during the year for the erection Labourers' Dwellings in towns was £11,000. This was much less than in the former year, when the amount was £24,242. The commissioners explain this falling off, which we regret to record, as rather accidental than otherwise; and they say the desire on the part of the public to avail themselves of the advantages conferred by the act, appears to be gradually increasing, as it becomes more generally known and understood. It is proposed with the five loans sanctioned to erect 132 separate dwellings, at an average cost of £84 each. We fear we have but few landed proprietors who erect farm or labourers' dwellings on their property on other than stern commercial principles. We think a little philanthropy, without altogether ignoring the commercial principle, would not be amiss; and apart from this view altogether, it would redound to the credit of most of our landed proprietors, to build modest, but suitable and healthy, cottages, for the housing of their labourers, instead of letting hundreds of cabins which are a disgrace to humanity remain in a state not fit for animals to breathe or sleep in. A farm labourer who is well housed will be the better able to do a fair day's work, and unlikely to increase the pauperism of the country. Badly housed, in addition to being badly fed, is a double and dangerous evil, for it produces ill health, that often ends in the workhouse, and the conversion of a number of able-bodied labourers into a host of hopeless paupers. Taxation increases, but the sequel need not be pictured in detail.

The loans for sanitary purposes during the year, amounting to £41,139, are also, we find, considerably less than last year; and need, we think, a fuller explanation than what the Board gives as the reason. Judging from the number and amounts of the applications made by sanitary bodies, and of more under consideration, the Board thinks that it must not be deemed as showing a less desire on the part of those bodies to avail themselves of the Fund. It is shown in the year that ten districts have obtained loans to the ex-

tent of £24,539 for sewerage works; six for water works, amounting to £16,200; and one of £400 for a slaughter house. We are of opinion that, notwithstanding the passing of the Public Health and other Acts, and the facilities afforded for obtaining loans through the Board of Works, that there is an evident dislike on the part of a large number of our public boards to undertake desirable sanitary improvements. The composition of the members of our town boards and guardian boards, needs improvement as much as the towns and districts they govern. Many of these persons are the greatest obstructives to sanitary reform, and they obstinately oppose improvements in several instances, because improved property means to them an increase of rent or taxation. There are other causes at work too well known to those who have a knowledge of the ways and workings of public bodies, that retard the progress of urgent sanitary improvements throughout the country.

In connection with the application for land improvement loans—a service which has been in operation since 1847, and which is expanding—we have to note that this service has been extended by the provisions of the Act 38 and 39 Vic. for the purpose of making advances in aid of National teachers' residences connected with the non-vested schools, to be applied either for the creation of new buildings or for enlarging or improving existing buildings, or, further, for the purchase of dwelling-houses. The loans for this purpose are not to exceed £250, the repayment of which is to be secured by a charge on the building itself, as well as upon the land on which it is erected. Eight of these loans have been authorised during the year, to the amount of £1,720.

In aid of purchasing farms by tenants, the sum of £68,106 has been allocated under the provisions of the Land Act. It is stated that since the passing of this Act in 1870, 575 tenants have purchased their farms, becoming proprietors to the extent of 35,975 acres, including £357,958 advanced by the Board. The annual rent paid in respect to these holdings was £24,460, against which the annual rent-charge payable to the Government will be £17,898 for thirty-five years.

*Re* "Advances and Repayments," the total advances made during the year amount to £406,572, against £312,952 of the former year, and the repayments, including interest, to £171,263, against £156,612. The repayments are stated to be made, with few exceptions, with satisfactory punctuality. Under the Reproductive Loan Fund Act it is stated that no applications have been made for any advance out of the funds of the non-maritime counties of Tipperary and Roscommon; and in Limerick no application has been received either for fishery or any other purpose. During the past season it is also observable that the funds of the Counties Kerry, Leitrim, and Sligo, were not taken up by the fishermen of these counties to the extent of the amounts which were available.

In the matter of Public Buildings, new works, repairs and maintenance, we find that the new Post Office at Cork is stated to be progressing satisfactorily, and that the new Post Offices at Waterford and Derry have been for some time opened for the transaction of business. New offices for Customs and Inland Revenue services at the last-mentioned cities have been provided in the recently erected public buildings there.

\* "The Forty-Fifth Report from the Commissioners of Public Works in Ireland," &c. Dublin: Alexander Thom. 1877.



New Constabulary Barracks have been completed at Monaghan, and at Howth, Co. Dublin. Additional cells have been added at Chancery-lane Police Station; a ball-alley at Manor-street barracks; and improvements at the ball-alley at Rathmines. New Coastguard stations have been completed during the past year at Bray, Cahirmore, Cushendall, Costello Bay, Cranfield Point, Gortrammagh, Killybegs, Portaferry, Port Ballintra, and Port Kinnago. New stations are at present erecting at Annagassen, Curraeloe, Doochoma, Knockallen, Mizen Head, Newcastle, Rossmoney, Tara, Torr Head, and at Rosslare, Wexford, where a drill shed, battery, magazine, boat house, and ship way, are being constructed. Extensive additions and alterations are also proceeding at Bonmahon, Buncrana, Malin Head, and Rosslare.

In the Phoenix Park, Dublin, the lodges of the bailiff, deer-keeper, gate-keeper, and park constables, have been kept in repair, "and the works necessary for the conservancy of the Park, and the cultivation of the People's Garden have been carefully carried out.

In connection with the Queen's Colleges, no works save repairs and maintenance appear to have been done throughout the year.

In the matter of National Educational Buildings, we find twenty-three new ordinary National school-houses have been built in the previous year, at a total cost of £8,198 14s. towards which the Board paid as grants two-thirds of the sum, £5,416 16s., the remaining one-third as usual having to be made by the contributions of local persons interested in their erection. For various additions, alterations, enlargements, and providing other building wants, at twenty-seven schools, the sum of £1,734 odd was expended, the Board contributing two-thirds, the other one-third being made up as before stated.

In new works, alterations, repairing, and maintaining the metropolitan or central model school buildings, the district model, minor model, and model agricultural schools, the sum of £5,405 was expended; and a further sum of £1,786 odd for furniture for these buildings; while on the ordinary National schools in charge of the Board, a sum of £3,180 odd was also laid out in works of repair and maintenance. Under the National Teachers' Residence (Ireland) Act, and the Labouring Classes' Lodging Houses and Dwellings Act, we have already stated the sum granted.

*Re Limited Owners' Residences*, the applications made under these Acts during the year include that of D. B. M. Baird, Esq., of Newtownstewart, for the erection of a mansion; the Earl of Kenmare, for ditto; the Earl of Wicklow, for improvements; Lord Kilmaine, for additions and improvements. The necessary preliminaries are not yet completed in relation to the above; and in the case of Henry Bruen, Esq., M.P., the Provisional Order has been made absolute to the extent of the value of the work executed. Of other works and operations of the Board we will speak as we proceed, and, when ended, make whatever comment may seem necessary in relation to the same.

**A PRIZE FOR PERSPECTIVE.**—A prize for perspective has been instituted and adjudged this year at the Ecole des Beaux-Arts in Paris, conformably to the will of the late M. Fortin d'Ivry. Its first recipient was M. F. Lacaille. It is worth 600*fr.*

## THE CAXTON CELEBRATION.

THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

### SECOND PART.

WE carried the reader down in our first paper, in a rapid sketch of the rise and progress of printing in Ireland, to the commencement of the eighteenth century. Materials are scant for affording a much fuller account than that which we have given, for until nearly the close of the seventeenth century, the printing art had not much extended or made any firm footing upon the soil, from the reasons already stated. Still, literary activity was rife; and, what a native press could not give to the world through the disturbed state of the times, a foreign press in the service of native intellect, lay and clerical, was utilised to give. Looking back again through some of the dreary years of the seventeenth century, we find clerics of both churches, at home and abroad, intent upon printing and publishing, as they were studious in writing and compiling; and they would have been only too glad to find a native printer and press, capable of undertaking their works, if other circumstances favoured their undertakings. The translation of the New Testament commenced by Nicholas Walsh, Chancellor of St. Patrick's, previously alluded to in connection with John Kerney, was left unfinished in consequence of the prelate's unfortunate death, but it was afterwards taken up and continued by Nehemiah Donnellan, Archbishop of Tuam, assisted by the aforesaid Kerney, and completed by Daniel or O'Donnell, the successor of Donnellan in that see. According to Boyle this translation was published in 1602, at the expense of the province of Connaught and of Sir William Usher, the Clerk of the Council. It may not be amiss to state that this was not the first translation of the New Testament into the native tongue, for, before the age of printing, the native Primate of Armagh, Richard FitzRalph, otherwise Richard of Dundalk, according to his biographers, Thomas of Walsingham and others, translated the Scriptures into the Irish language. History does not afford us any particulars whether the Irish translation was transcribed and copies of it circulated throughout the country for the benefit of the natives. Indeed some authorities quoted by the late H. J. Monck Mason, in his "Life of William Bedell," the Bishop of Kilmore mentions some doubtful circumstances concerning the Irish Primate and his book the MSS. of which he was said to have "immured in his Cathedral of Armagh." Be that as it may, our annals supply us with authentic information concerning the translation and transcribing of copies of the Gospels and other portions of the Scriptures, and of many versions in Latin and Irish characters. Our early Irish ecclesiastics, and several of our learned laymen too, evidenced both zeal and ability in the compiling and writing of religious and other works, and disseminating information, centuries before the art of printing was practised.

In the reign of James I., as well as of Elizabeth, there was a great desire manifested to have the New Testament and Book of Common Prayer translated into the Irish language, of course for the avowed purpose of converting the natives. In a report to King James, made by the Lord Deputy, Sir Arthur Chichester, the Lord Chancellor, Lord Wilmot, Lord Caulfield, and others, that prince issued orders in February, 1603, of which the following is part:—"We do also command that the New Testament and Book of Common Prayer, translated into Irish be hereafter frequently used in the parishes of the Irishrie; and that every non-resident there do constantly keepe and continue one to read service in the Irish tongue." And in the reign of Charles I., in a letter written to Primate Usher, special care is enjoined respecting the previous orders of King James that "the New Testament and Book of Common Prayer, translated into Irish, be frequently used in the parishes of the Irishrie;

and that every non-resident there do constantly keepe and continue to read service in the Irish tongue," &c. The convocation of 1634 enacted the previous canons.

Bishop Bedell, previous to the stirring days of 1641, set before him the work of an Irish version of the Old Testament, and by native help finished it in a few years. This work he resolved to publish immediately at his own expense, and in his own house, as we are told by his biographer; and that, further, he had made an agreement with a person who undertook to print it, and that the types were even ordered from Holland. The Rebellion of 1641, however, hastened the death of Bedell, and delayed the publication of the work for several years. The celebrated Robert Boyle, who took great interest in the translation and publication of an Irish version of the Scriptures and in Bishop Bedell's work, published an edition of the New Testament in 1681; and in 1684 the Old Testament was printed from the original MS. of Bedell in 1685, in quarto, to accord with the New Testament already mentioned. So forty-four years had elapsed after the engagements entered into by Bedell for printing his work in Ireland, before Robert Boyle completed the work at a press in the sister capital. Some small printing work appears to have been executed for Bishop Bedell by Dublin printers previous to the disturbances of 1641. In a note in H. J. Monck Mason's life of the bishop it is stated "that the bishop engaged all his clergy to have an English school kept in their respective parishes, and printed for their use at Dublin in 1631 a small catechism of one sheet, called the A B C, or Institution of a Christian." This sheet was printed with Irish and English on opposite pages.

In respect to an English version of the Scriptures, we may note here that a claim has been raised on behalf of Belfast, of having produced the first printed copy of the Bible in Ireland, but this claim has been disputed. The edition referred to was issued from the press of "James Blow," about the year 1705. The same printer issued a number of other books, educational treatises, and several issues of "chap books," now very rare.

From 1641 down till after the Battle of the Boyne, comparatively little printing work was executed in Ireland: still the last twenty years of the seventeenth century is signalised by some activity. The first Dublin newspaper, as we have shown, was published in Skinner's-row, in the vicinity of the Tholsel, the then centre of old Dublin municipal and legal life, in 1682, and the first regular newspaper, *Pue's Occurrences*, in 1703. On Sept. 30th, 1690, we find the *Dublin Intelligencer*, No. 1, published by authority, printed by Joseph Ray, on College-green. Concerning this printer, and Eliphal Dobson, the noted bookseller, of Castle-street (previously alluded to), Dunton, that rare old bookseller, critic, and chronicler, writes:—"He is slender in body; his head is rather big than little; his face thin and of a moderate size; a smooth tongue, and voice neither deep nor shrill. His countenance is ever intermixed with joy and sweetness. He is a courteous man in his shop; and, being both printer and bookseller, has got a good estate in a few years; he is the best situated of any bookseller in Dublin. But I shall leave Mr. Ray to ramble to Castle-street, where Eliphal Dobson with his wooden leg startled me with the creaking of it, for I took it for the *Crepitum Ossium*, which I have heard some of our physicians speak of. Mr. Dobson is a great dissenter; but his pretence to religion does not make him a jot precise. He values no man for his starched looks, or supercilious gravity, or for being a Churchman, Presbyterian, Independent, &c., provided he is sound in the main points wherein all good men are agreed."

Andrew Crooke, who lived on the Blind-quay, and was appointed king's printer in 1693, was a Dublin printer of some note in his day. He is favourably noticed by Dunton as "a worthy and generous gentleman, whose words and meaning never shake hands and part, but always go together. He is one that



is as far from doing other men injury as he is from deserving to be injured; and, though his circumstances are not so great, yet his soul is as large as if he were a prince, and scorns as much as to do an unworthy action." Dunton tells us further that Crooke "is a great lover of printing, and has a great respect for all that are related to that noble mystery."

Between 1680 and the commencement of the eighteenth century several booksellers started, and plied their trade with profit, but the State printers had nearly all the trade to themselves. It is not our intention to particularise from this date onward the names of all the printers who commenced the practice of their art, and several successfully; but, as we proceed, we shall mention a few of the most remarkable of them who printed and published throughout the century, and who were otherwise noticeable. In Gilbert's "History of Dublin," and in Dr. Madden's "History of the Periodical Literature of Ireland" particulars of several early newspapers and their printers will be found, with other matters which would be out of place here. Edwin Sandys, who published at the old Custom House printing office in Essex-street, in 1709, *The Flying Post, or the Post Master's News*, was the licensed printer of the *Dublin Gazette* as early as 1705, in Crane-lane, from which he removed to Essex-street. He is mentioned in Mr. Gilbert's work as an artist employed as draughtsman by the Government and by the Dublin Philosophical Society, and residing in Crane-lane towards the end of the seventeenth century. The only portrait of Sir William Petty, first president of the society, was drawn and engraved on copper by Sandys, who likewise, says the same authority, executed "A New Map of the City of Londonderry, with its confines, as it was besieged by the Irish army in the year 1689, exactly surveyed by Captain Nevill." This is a large map, in four sheets, comprising views of the city and public buildings, with a dedication by Sandys to their Excellencies Henry Lord Capel, Baron of Tewkesbury; Sir Cyril Wych, knight; and William Duncombe, Esq., Lord Justices and General Governors of Ireland.

Edward Lloyd, who had a printing office in Essex-street, at the corner of Sycamore-alley, was a somewhat remarkable printer. In 1707 he was ordered into custody by the Irish House of Lords for having published an objectionable political pamphlet. Later, in 1713, he fled from Dublin, to escape the consequences of an indictment found against him in the Queen's Bench for having in his *News Letter* advertised a proposal for publishing by subscription the "Memoirs of the Chevalier St. George." Lloyd's papers were seized by the order of the lords justices, to prevent the publication of this pamphlet. He petitioned, and showed he had no evil design; and, having promised future good conduct, the Duke of Ormond, the then viceroy, put a stop to the proceedings.

Edward Waters, who also lived at the other end of Sycamore-alley, and who was established there as a printer as early as 1711, was the object of a government prosecution in 1720, for publishing one of Swift's productions—"Proposal for the Universal Use of Irish Manufacture in Clothes, Furniture, and Houses, &c., utterly rejecting and renouncing everything wearable that comes from England"—for burning in fact everything that came from England but her coal. This interference with the interests of English traders was not to be tolerated on the part of an Irish subject, so the unlucky wight was prosecuted with a vigour. The jury, though packed, brought in the printer not guilty; and though sent back nine times, and detained eleven hours, they still held out, and left it to Judge Whitshed finally as a matter of mercy to record a special verdict. The then Lord Lieutenant, Duke of Grafton, granted subsequently, by advice from England, a *nolle prosequi*, but the poor printer was almost ruined by this prosecution.

Edward Waters, later in the century published on the Blind-quay, in 1729, *The Dublin*

*Journal, with Advices Foreign and Domestic*; and on the same quay, near Fishamble-street, Sarah Harding, the widow of one of Swift's persecuted printers, published in the above year Swift's celebrated satire entitled "A Modest Proposal for Preventing the Children of Poor People from being a Burthen to their Parents or the Country, and for making them Beneficial to the Public."

Dublin printers of the national type had hot times of it in these years. Several attempts at founding newspapers were made during the first half of the eighteenth century, but few were long-lived. The last half of this century became more signalised by its ambitious ventures in the newspaper and periodical line, several of which were highly creditable in every branch of the printing art. It is not, however, to be inferred that the press of Ireland was not distinguished by literary merit and typographical excellence in the first half of the eighteenth century. Bad and wretched printing there was no doubt in Dublin, and some was to be found in other cities and towns in the sister kingdom. A few names stand out boldly and brightly among the list of Dublin printers and booksellers even early in the eighteenth century, who reflected a credit upon their craft; and some of these and their direct successors continued with reputation in the same line to the close of the century.

As early as 1709, in Essex-street, at the sign of the "Two Bibles," the printing office of George Grierson was established. The family of Grierson from that time almost to the present have been connected closely and honourably with the history of the printing art in Ireland in several of its branches. Among the productions of George Grierson's press, was the first edition of "Paradise Lost," published in Ireland (1724). He also published a translation of Dupin's "Ecclesiastical History," 1722-4, in four volumes. This work has been accounted by several of our bibliographers the most valuable edition of the work in English. Grierson was the publisher of Sir William Petty's Maps of Ireland, and as editor as well as printer and publisher dedicated them to Henry Petty Earl and Baron of Shelburne, Viscount Dunkerrin. By this nobleman's munificence, the editor says, the original copperplates were freely communicated to the public. George Grierson issued several good editions of the Latin classics, one of Persius, with an English version and commentaries by Dr. Thomas Sheridan, in 1729. In the same year he issued an accurate and handsome quarto edition of "Publii Ovidii Nasonis Metamorphoseon," &c. In 1730 he published the works of Tacitus in three volumes 8vo, edited by his accomplished wife Constantia Grierson, from the text of Ryckius.

Mrs. Grierson, though she died young at the age of twenty-seven in 1733, was gifted with extraordinary talents, and was proficient in Greek, Hebrew, Latin, and French, and it is stated she understood mathematics as well as most men. She was a native of Kilkenny, and her parents according to one authority were "poor illiterate country people." Her learning, writes the same authority (Mrs. Pilkington), "appeared like the gift poured out on the apostles, of speaking all languages without the pains of study; or like the intuitive knowledge of the angels; yet inasmuch as the power of miracles is ceased, we must allow she used human means for such great and excellent acquirements." Constantia Grierson was well known and appreciated by the literary celebrities of her day, including Swift and his friends.

The Grierson edition of "Tacitus" is now very rare, and much sought after by book collectors. Prefixed to this edition is a dedication to Lord Carteret, the then Viceroy. In 1727, George Grierson obtained, through the influence of Lord Carteret, a reversion of the patent office of King's Printer in and through all Ireland; and in the same year he published in 32mo, in the Elzevir style of typography, an edition of Justin, followed by one of Terence—"Acceserunt emenditiones omnes Bentleiane Editio Novissima. Dub-

linii: Ex Officina Georgii Grierson, 1727." The eldest son of Constantia Grierson, George Abraham, is described as a young gentleman of uncommon learning, and of great art and vivacity. This son died at the same age as his mother at Dusseldorf in 1755, his father having died two years previously. The history of printing and publishing in Ireland is inseparably connected with the Grierson family during the last and present century.

The name of Powell, or Powel, appears to have been early and long associated with the printing craft in Dublin, for it occurs as early as 1551 in the case of Humphrey Powel as before-mentioned; and the name is conspicuous among the names of the Dublin printers of the eighteenth century. In 1708 a newspaper was published, called "*The Flying Post, or the Postmaster*," printed by S. Powell and F. Dickson, in the Lord Chief Baron's Yard on Cork-hill, where fresh and full news will be hereafter printed, without imposing old trash on the public."

Samuel Powell became an eminent typographer, and during his career had printing-offices in Skinner's-row, Crane-court, and finally in Dame-street, opposite Fownes's-street, where he built a large printing-office in 1762. Powell died at an advanced age in 1772. Thomas Gent, the author of the "History of Rippon," was an apprentice of Powell's. A notice of him in Mr. Gilbert's "History of Dublin," says Gent decamped to England in 1710, and owing to the persecution which he afterwards experienced from Powell when he returned to Dublin, his native city, was the cause of his quitting Dublin and settling in York, with the printing annals of which his name now inseparably connected. The printing work turned out by Powell has long been acknowledged as excellent, and challenging comparison with any of the London printers of the time. It certainly excelled his Dublin contemporaries in beauty and accuracy. Powell during his long career did a large amount of printing, and in great variety; and as printer his name is connected with several newspaper and periodical undertakings, which we will allude to hereafter. Among other outlived and unfortunate printers early in the last century was Pressick Ryder, the father of the Thomas Ryder who became one of the most celebrated actors on the Dublin stage, and manager of Smock-alley Theatre. In 1725 a periodical entitled the *Dictator* was issued jointly by Thomas Harbin and Pressick Ryder, from offices in Old Cork House, adjoining the present Cork-hill. The elder Ryder having printed a pamphlet against the Government, and a proclamation offering a reward for his apprehension having been issued, he was obliged to fly the country under the assumed name of Darby. He continued for many years in England as a strolling player.

One of the most noted and facetious printers of Dublin, in the early portion of the last century was James Carson, of whom Mr. Gilbert has compiled some interesting particulars. He had a printing-office in 1724 in Coghill's-court, off Dame-street, and in that year published the "*Dublin Intelligence*," containing a full and important account of the foreign and domestic news." The following year Carson commenced a Saturday newspaper of four pages small folio, in double columns, with the following title surmounted on either side with the harp and crown and the city arms, "*The Dublin Weekly Journal*," Saturday, April 3, 1725." The remarkable feature concerning this journal is that it was the only Irish newspaper of its day which had original articles. Sir Walter Scott was of opinion that two of the said articles were the production of Swift. The principal writer was Dr. James Arbuckle, whose contributions to it were afterwards printed in two volumes under the title of "Hibernicus's Letters." Francis Hutcheson, the noted moral philosopher was also a contributor to Carson's newspaper.

In 1729, Carson, like some other journalists of our own day, complains of the shabbiness



of people who, instead of buying his paper at three-halfpence, procures it at "a halfpenny a read" from the hawkers. "I'm obliged," says the irate journalistic printer, "to keep secretaries, messengers, and devils"; and, further on, "I must go to balls, masquerades, operas, and plays; I must frequent the Exchange; Lucas's, Templeogue; the Green, and Bason, to pick up the news for the ladies." It seems after all, though the facetious printer kept secretaries, messengers, and devils to do his work and go his errands, he performed not a little travelling and reporting himself upon "Shanks's mare." Though long known as the "facetious Jemmy Carson," and being a favourite subject for some of the small wits and rhymers of his time, our Dublin printer was an excellent typographer. He published a folio edition of Dermot O'Connor's translation of "Keating's History of Ireland," and one of the plates of this exhibits Carson's own armorial bearings: Argent, a chevron gules between three crescents. In 1745 "Jemmy Carson's Collections" appeared in one volume, and it reached a second edition. This facetious yet industrious and enterprising printer died in Temple Bar, in the year 1767.

As the eighteenth century advanced, printers and booksellers became numerous in Dublin, and book auctions common. Piratical editions of London and foreign publishers were also produced to some extent, and some London printers and booksellers are found returning the compliment when any good or noticeable work was issued from the Dublin Press. But of these and other matters we will take notice as we proceed with our sketch of the principal and most notable members of the printing and publishing trade in Dublin.

#### WATER SUPPLY RE DUBLIN AND KINGSTOWN.

WHILST liking to see justice done to the townships in any agreement made between them and the Corporation, yet we must say that the agreement recommended in the report brought up by the Waterworks Committee at last Monday's meeting of the Town Council was not only a one-sided, but a most urgent one. It is not a question of politics, and therefore we endorse on this occasion the action of members who on both sides opposed the agreement, and succeeded in having the report sent back for reconsideration. The extraordinary feature of this agreement was, that the Corporation should supply the township with Vartry water, averaging in quantity to a million of gallons per day, at the rate of three-halfpence per thousand gallons. Further, if more water was desired on any one day, it should be supplied at the same rate, with the provision that on the whole quarter of the year the million of gallons per day was not to be exceeded. Also, a further provision stipulated that even without the average being exceeded on the whole quarter, any excess above a million and a quarter supplied on one day, should be charged at the prescribed rates. Is it any wonder, in the face of such bargains and other previous mismanagement in the same direction, that Dublin is getting heavily into debt on the head of this Vartry supply to the tune of £3,000 and upwards annually? We spoke more than once in favour of Rathmines and other townships when we thought the Corporation of the city was driving in a wedge to make them contribute funds which had administration on the part of the civic authorities left them powerless for the time being to raise. Both Rathmines and Pembroke townships are wealthy townships, and are growing more wealthy yearly. A very soft bargain has

already been made with Pembroke, which pays only 3½d. in the pound for a water supply, for which the citizens of Dublin are paying 15d. Similar soft bargains have been made with the Blackrock, Kingstown, and Bray townships. Perhaps our city magnates think it as only an act of consistency on their part to blunder to the end of the chapter, by enabling Rathmines Commissioners to shake hands with their brother town commissioners, and in a social re-union drink long life to the City Fathers, with a mental reservation, of course, while outwardly accompanying the toast with a hip, hip, hurrah!

"We're all right merry good fellows,  
Which nobody can deny."

The story of the whole surroundings of the water supply and management in Dublin, we have long been of opinion, from its first inception to the present, would not bear the light of day. That the Vartry supply *per se* is a great benefit to the city we have never doubted since it came into operation, but the fact is patent to all sensible and independent men that the undertaking from first to last in its management has been made a milch cow of for the benefit—well it would be difficult to tell the when, where, whence, and whither of all the money that has been shamefully wasted. The safest thing that can be uttered at present on our part is that thousands of pounds have been lost to the city, that good management might have saved for the carrying out of sanitary improvements long called-for and still neglected.

#### OUR ILLUSTRATION.

##### CHAPEL OF OUR LADY OF LOURDES.

IN this number we present our readers with a view of the new Chapel of our Lady of Lourdes, proposed to be erected in connection with the Carmelite Church, Aungier-street, in this city, from the designs of Mr. George C. Ashlin. The drawing has been made by Mr. H. Gribble, and photo-lithographed by the City Printing Company.

#### A METHOD OF TEACHING DRAWING.\*

THE *Moniteur des Arts* of Paris has the following article on the important subject of the teaching of drawing. Introducing to its readers a work on the subject, it says:—

The name of the author is already familiar to artists and to the public which occupies itself with art, it is M. Horace Lecoq de Boisbaudran, formerly director of the Normal school.

This method seems to us to be particularly distinguished by the attraction which it offers to pupils, and for the attachment with which it must of necessity inspire them for the object of their studies. To teach is not sufficient, a taste for work must be created if any best fruits are to be culled. A wise gradation of exercises, a judicious employment of the faculties, great liberty in the choice of subjects and processes, form so many conditions of success; such, moreover, is the fundamental basis of the system which experience has consecrated, but of which the efficacy is not yet apparently recognised by everybody.

M. Lecoq de Boisbaudran has thrown his work into the form of letters addressed to a young professor, and in five letters the author explains his method with perfect cleverness, and all in a hundred pages, without dryness or without omissions. The brochure takes up the pupil at the moment of his first handling a pencil, and leads him up to high art, without painful efforts, by the logical development of his faculties. From the outset the lessons inculcate the art of seeing correctly, judgment of distances, order and progression in the work. These results being obtained, the second period may be entered upon, in which the difficulties have to be

surmounted of studying models in relief, which enlightens the young draughtsman, and makes him understand not only the forms, but the play of light and shadow. M. de Boisbaudran recommends the alternata employment of drawn or engraved with relief models, and the taking up at once the human figure, which combines all difficulties, and after which all other subjects become easy.

At this phase of instruction, the first germs of artistic sentiment begin to appear, and the third stage may be approached. Here the pupil commences his study of the round, commencing with parts of heads modelled separately, and proceeding gradually to the whole head, and finally to the entire figure. Above everything the models must be correct and uniform; and the professor can only assure this by the employment of tact and patience, for every one knows how very rare are well designed models. The author now introduces one of the most interesting exercises of his system, namely, drawing from memory, which, proceeding gradually from the simplest to compound forms, constitutes excellent practice both for the intellect and the hand of the pupil. Commencing with the profile of a nose in outline, the student finishes at last with the interior of a museum of sculpture. We have seen studies of this kind executed under the severe control of the Academy of Beaux Arts (Paris), where no deception could possibly be introduced, and it would be difficult to imagine anything more interesting. But we have not yet arrived at this last position; in this third stage tact and experience are of extreme importance, for the lessons must be varied, and graduated to suit the ability and the taste of the pupil; but the exercise of the memory must not be allowed in any way to interfere with the ordinary studies.

The fourth degree is reached when the pupil has overcome the first difficulties of the art; this period therefore comprises the study of the antique and of the old masters, and of the living model, anatomy, perspective, architectural drawing, painting, the exercise of memory, and, finally, composition. The mission of the professor develops and becomes elevated as the instruction progresses, for his duty is at once to inculcate taste for the works of the masters, and yet to protect the individuality of each of his pupils. M. Lecoq de Boisbaudran insists, and with reason, "that no unvarying mode of working shall be imposed on a pupil, but that all shall be encouraged to try several modes in order that they may judge, choose, and make for themselves in painting, a mode of expression appropriate to their turn of mind."

The fifth stage supposes the pupil practised in all the exercises of the calling, and attracted towards high art; it is that of superior instruction, which includes anatomy and perspective, no longer studied on paper but from nature, and where many models allow of complicated exercises; then the professor may ask of the young painter graphic *comptes rendus*, so to speak, of what he has observed in his works or during an excursion—a new and valuable occasion of exercising the memory and the pencil.

In an appendix, amidst other interesting notes, M. Lecoq de Boisbaudran sums up in the following terms the duties of those who teach:—"The true professor must exclude any fixed idea from his judgment. Instead of appearing to be attached exclusively to any one particular conception of art, he must learn to appreciate all those which have already appeared, and gather together for the benefit of his pupils any new impressions that may arise; above all, he must never propose his own works as examples, for the more completely impersonal he appears, the more will he preserve to all of his pupils their own personality."

It must be understood then that the functions of a professor call for abnegation, devotion, learning, elevation of ideas, and finally, that he should be esteemed as he merits to be. This is one of the indispensable means of regenerating instruction, and consequently art itself.

#### BOOKS RECEIVED.

Sermons in Irish-Gaelic, by the Most Rev. James O'Callaghan, Bishop of Raphoe, with Literal Idiomatic English Translation, on opposite pages, and Irish-Gaelic Vocabulary, also a memoir of the Bishop and his Times. By the Rev. Canon Ulick Bourke, M.R.I.A., President of St. Jarlath's College, Tuam.

Journal of Forestry and Estates Management, No. III., for July. London: J. & W. Rider.

Forty-fifth Report of the Commissioners of Public Works, Ireland, 1876-7. Dublin: Alexander Thom.

\* From *Journal of the Society of Arts*.



## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

We find Sheridan next appearing in *Hamlet*, and well received, and afterwards in a round of characters, drawing good houses in his Richard, Horatio, Shore, Tamerlane. Lee makes his first appearance in *Lear*, following as Hastings, Iago, Hotspur, &c. The strength of the Smock-alley company may be estimated by considering that the following were the principal performers at the time: Sheridan, Heaphy, Wilder, Lee, Dexter, King, Glover, Mrs. Wilder, Miss Grace Phillips, and Mrs. M. Phillips. Mr. and Mrs. Wilder made their first appearance at Smock-alley on December 17, 1756, in the parts of Macheath and Polly in the "Beggars' Opera," having arrived from Drury-lane a short time previously. By their good performances, we are told, they gave satisfaction to the Dublin audience, and brought once more the opera into fashion, and occasioned it to be performed once a week during the season, for upwards of twenty nights. Wilder, in his Captain Macheath, sang a new song, much relished, called "Cock and a Bull," and, becoming a great favourite, was regularly advertised with the opera.

It appears from Hitchcock and others that the great success of Mr. and Mrs. Wilder in their characters induced Sheridan to provide "the elegant musical entertainment of the Oracle." Mrs. Wilder, being young at the time, and a good figure, was esteemed excellent in girls; and her Cynthia and her husband's Oberon seem to have given considerable satisfaction for a number of nights. Sheridan revived the "Tempest" with care and expense, and his Prospero and King's Trinculo were accounted excellent, the piece bringing five or six good nights. *Coriolanus* and *Barbarossa* were also brought forward again, but yielded little return.

Soon a feeling of unrest was felt by Sheridan and others associated with him, for whispers and rumours of an opposition were becoming louder and clearer, and at last all doubt was removed, for the ground of the old music-hall in Crow-street was announced to be taken, with a view to the erection of a new theatre, of which Barry was the intended manager. Sheridan at once foresaw the difficulties and obstacles that lay in his future path, and also what opposition was likely to beget for both parties. Victor was deputed by the manager to proceed to London before the arrangements were too far advanced respecting the providing of a new theatre, and to endeavour to persuade Barry from his hazardous undertaking. As Victor was leaving, on what proved a fruitless mission, Foote, the great English actor, arrived, to give a tone to the performances at the latter end of the season. He opened in his own comedy "The Englishman returned from Paris," as Sir Charles Buck, subsequently performing Bays, Hartop in "The Knights," and Fondlewife in "The Old Batchelor," &c. Foote's Dublin engagement turned out profitably for himself and with advantage to Sheridan.

Home's tragedy of "Douglas" was about this period making some noise in the theatrical world, albeit that Garrick had previously persevered in rejecting it. Sheridan brought it out at Smock-alley, but it was not a successful hit on his part. We will let one whom we have already quoted several times tell the reason of its non-success:—"Successful as it was at other theatres, its power failed in Dublin at this time. It is true, nature had not formed Mr. Sheridan to personate the blooming Douglas, nor had he any lady at that time who could in any measure do justice to the exquisite feelings of Lady Randolph. In a few years after, Mr. Digges, and then Mr. Barry, answered our utmost ideas of the blooming Norval; but it was reserved for Mrs. Crawford, in the sorrowful Matilda, to charm the public with one of the most beautiful pieces of domestic distress ever exhibited. If the reader would wish to know how the tragedy was at the present

supported, it was in this manner: Young Norval, Mr. Sheridan; Old Norval, Mr. Lee; Lord Randolph, Mr. Dexter; Glenalvon, Mr. Stayley; Anna, Miss Grace Phillips; and Lady Randolph, Mrs. Kennedy, who, though a good actress in comedy, had but few pretensions to the buskin."

In reference to the production of the tragedy of "Douglas" in 1758, it may be justly stated here that Sheridan, with characteristic liberality, resolved to give Home, the author, the receipts of the third night; but ecclesiastical censure being visited by the elders of the Kirk on the reverend author, the play, though bringing an overflowing house on the first night, fell off immediately, and its third performance at Smock-alley did not pay the expenses of the house. According to Hitchcock, it was only performed two nights. However, be that as it may, to compensate for the disappointment, Sheridan presented Home a large gold medal, on one side of which was engraved a laurel wreath, and on the reverse this inscription: "Thomas Sheridan, manager of the Theatre Royal, Smock-alley, Dublin, presents this small token of his gratitude to the author of 'Douglas,' for his having enriched the stage with a perfect tragedy." It may not be amiss to state here that, though clerical censure drove Home out of his church, he found a friend in the Earl of Bute, and through him and other influences the Prince of Wales had a pension settled upon the author, who henceforward pursued his literary tastes, besides holding a government appointment.

During the season of 1758, from January 28th to March 16th, the receipts of twenty-one of Sheridan's nights brought the sum of £1,631 1s. 11d. (Irish money), or an average of £77 7s. 2d. per night. The three highest receipts were on the occasions of the 6th of February, when "Hamlet" brought £118 4s. 11d.; 27th, ditto, "Richard III." brought £110 19s. 9d.; and on the 11th of March, when "Richard" brought £100 14s. 7d. The lowest receipts were those of "Comus," on the 16th of February, bringing only £41 8s. 9d. The tragedy of "Douglas" on two occasions—March 10th and 16th—brought respectively £84 0s. 3d. and £73 19s. 10d.

At the commencement of Sheridan's management, after his recall in 1756, always alive to the necessity of reforming the abuses connected with the Irish Stage, he introduced a number of alterations, which he for the most part successfully enforced. One of these was the converting of the upper gallery into boxes, and raising the price to half-a-crown. His object in doing this was to put an end to the numerous complaints and outrages committed by the frequenters of the upper gallery. Though this alteration answered one of the ends that Sheridan had in view, yet it seems to have proved detrimental to his interests. Fashion or novelty drew the ladies and gentlemen in numbers to the upper boxes, leaving those below and the pit not half filled. It brought order and quiet, however, and this was urgently needed at the time.

Events are hastening and crowding one upon another, and Spranger Barry is about bursting forth in the full blaze of a Dublin manager and star within a stone's throw almost of that Skinners'-row where he was born verging upon forty years previously. Victor, Sheridan's deputy manager, while in London, failed in his repeated interviews with Barry to convince him of the risks of his project and the advantages of Sheridan's proposal, whereby he (Barry) might in a short time become sole manager of the united theatres of Smock-alley and Aungier-street. Barry preferred to rule and reign supreme, and it is plain that he did not care to enter into any partnership with Sheridan. Without stating what particular exceptions he had to a partnership, he contented himself by replying to Victor that he was too far advanced in engagements respecting the new theatre to recede, and that, let what would be the consequence, he was resolved to proceed. Indeed from subsequent events it appears to have been a foregone conclusion with Barry to

persevere in his design, aided and encouraged as he was by a number of friends.

Victor, failing in his negotiations, after some difficulty made engagements with Mrs. Gregory and Mrs. Hamilton to perform at Smock-alley, the former at £500 and the other at £400 for the season. Rich, the manager of Covent-garden, on finding that Sheridan had secured the services of Mrs. Hamilton, insisted, we are told, upon her breaking her articles, promising to indemnify her from all damage. A law-suit succeeded in consequence of the London manager's dishonourable conduct, in which, after running for three years, Rich was eventually cast, and mulcted very justly in the penalty of £500 and costs. Woodward was induced to join Barry in his new scheme, and Macklin also lent his influence, for it appears that on his return journey Victor met both Barry and Macklin at Holyhead embarking in the same vessel, which arrived at Dunleary (now Kingstown) in the latter end of June.

While preparations are being actively made for building the new theatre in Crow-street, let us go back for a brief notice of Sheridan's theatrical efforts in the latter end of 1757. Finding it impossible to prevent determined-upon opposition, he, in the meantime, gave more attention to the business of his own theatre, and the providing of good pieces and performers, as far as it was in his power to secure both. The theatre opened on October the 10th, with the "Fair Quaker of Deal;" and on the 24th of the same month Sheridan himself played *Hamlet* to a good house. Mrs. Gregory, afterwards Mrs. Fitzhenry, appeared in Calista, and was as usual well received. Foote, who continued for some time with Sheridan, acted Ben in "Love for Love;" Fondlewife, and some other characters. It was remarked at this time that Foote always played the characters in his own pieces inimitably; but, he was not so successful in pieces written by other authors. A young gentleman, well known to the world afterwards as an actor and author, emerges into notice at this time in Dublin, through his connection with Foote. This young actor and great mimic was no other than the once famous Tate Wilkinson; but of him hereafter. On December 7th, 1757, when Foote was announced as Captain Brazen in the "Recruiting Officer," another young actor makes his first appearance, whose name in after years became somewhat famous in its connection with the Dublin stage, both in his character of actor and manager at Smock-alley and Crow-street. The young actor's name was Ryder, and one who knew him well writes—"that on the first night he displayed great abilities, which time afterwards matured and brought to perfection, and so discernible was his merit that the audience constantly embraced every opportunity of testifying their sense of it." In the following March, before the benefits commenced, Sheridan, anxious to ascertain how many of his company were willing to remain under his banner, began his enquiries with Mrs. Fitzhenry. He offered her the same salary again, and on her declining, he raised it to £600. His object was to secure a few of the best performers. Mrs. Fitzhenry had, no doubt, overtures made to her by the opposite party, as she declined giving Sheridan a definite answer until she heard from the other side, who were preparing fastly for the opening of Crow-street.

Sheridan it appears grew incensed at what he considered a rather ungenerous proceeding on the part of Mrs. Fitzhenry, and he with warmth imprudently declared against entering into articles with any one. His rash resolve led to King and Dexter bethinking of their own interests, and being uncertain as to the retention of their services by Sheridan, passed over to the opposition, and signed with Barry's attorney an engagement for the ensuing season. Sheridan was afterwards conscious of his error of judgment, but he certainly had reason to complain of his treatment by Mrs. Fitzhenry. The loss of this actress, as of King and Dexter, was a rather severe blow, and though he set about

\* See ante.



with some vigour to retrieve it, he was too late to overcome the difficulties that beset his path. Determined upon a vigorous opposition, Sheridan and Victor proceeded to London to procure what attraction and novelties they could for the following winter. The engagement of Digges, Mrs. Ward, and Theophilus Cibber was resolved upon, the former two for the tragedies, and the latter to add strength to the comedies. Woodward was known to be capital in pantomime, and as such he would of course be a tower of strength in Crow-street with Barry. So the Smock-alley management were resolved to oppose the new theatre in the best way they could. Sheridan purchased from the manager of Sadler's Wells Theatre, whose pantomimes were in great esteem, the entire pantomimic plant, string music, scenery, and appliances, for £100, said originally to have cost £500. Rosaman, the manager's carpenter, was also engaged to put together the work in Dublin, so as to fit it to the Smock-alley stage. The famous wire dancer, Maddox, was likewise articulated for £200 to act the harlequin. The fates, however, after conspiring, the opposition is running in oiled grooves, breakers large and ominous are ahead, and a wreck sooner or later is becoming inevitable to Sheridan's hopes.

## LECTURES ON ARCHITECTURE.\*

(Continued from page 192.)

### FIFTEENTH CENTURY.—OLD LONDON.

HAVING now traced the gradual advance of English domestic architecture through the Saxon and Norman, the Early English, and the Decorated varieties, we are approaching a less typical period. The remains of the fifteenth or succeeding centuries are not indeed wanting in high interest, and often great magnificence, but they do not speak to us in quite the same manner of increasing civilisation, and its consequent social changes. The great mansions of the country gentry were still palaces, and only become more domestic in their details, differing in degree rather than in kind, from those which preceded them.

The Decorated has been termed the only complete style of English Mediæval architecture, but that which is termed the Perpendicular is perhaps more English than any other. It possesses great advantages for domestic work, which have perhaps not been always sufficiently appreciated by modern revivalists. The pointed arch was exquisite in proportion and beauty, for the simple requirements of ecclesiastical design, but as the domestic wants of the day increased, a more plastic method of building became a necessity, and this was found in the flat-arched style, which we call Perpendicular or Tudor. There are many examples of the application of this development in house-building; and Crosby Hall, in the City, is a good specimen, easily accessible to you, of a merchant's town residence. Many farm-houses, in various parts of the country, still contain remains, more or less perfect, of the style, although the number of them is daily being lessened.

After the dissolution of the religious houses, and the appropriation of their property, the splendid palaces of abbots and bishops became manor-houses, or private gentlemen's residences; and these have, in numerous cases, degenerated into farm-houses. In them, the appearance of fortification was still often kept up, but evidently more from association, or perhaps for ornament, than for use or from necessity. The parapets were battlemented, but the windows were enlarged, the entrance was in the lower floor, and height was attained by the erection of several stories.

The architectural features followed generally the changes which were beginning to show themselves in the cathedrals and churches, but there is now a distinct difference perceivable between domestic and

ecclesiastical buildings, inasmuch as the arch was frequently laid aside in the former class, and a more horizontal treatment adopted. Not that the Perpendicular had ceased to be still an arched style; but in house-building, windows and panelling reduced the arch to a comparatively secondary position, by the prominence given to the horizontal features of the design, particularly in the later, or Tudor, phase of the style.

In the work of the Perpendicular period generally, the arches and the windows are the most characteristic details, or at least those which will strike first the ordinary observer. The pointed arch had given way to the depressed, or four-centred form, which is known among us as the Tudor arch. Introduced gradually, this feature became at last almost universally used. In doorways it was framed in, as it were, by the label on dripstone, which had become an enlarged and more important feature than before. Hitherto the label followed the curve of the arch, and served as a protection to it. It now frequently formed a square head over the arch, with spandrels filled with tracery or carving. The ogee form also, which was sparingly used in the preceding style, became a favourite feature, and was used freely, with crockets and finials, often richly carved. The arches, in fact, now assumed a greater variety of form than at any previous period.

The windows were large, with numerous lights, and, as a rule, when of considerable height, divided by horizontal transoms. The heads were filled with tracery, as before, but the character of the latter was altered. The circles, quatrefoils, and the like, as well as the more flowing patterns, had disappeared, and perpendicular lines prevailed. In some instances these ran from the sill to the arch, the curves of which were generally reproduced in the minor divisions of the tracery, and in all cases the windows exhibited the prevalence of vertical lines. Another peculiarity of the time was the plentiful use of panelling. The surfaces of the walls and buttresses were profusely decorated in this manner. The panels followed the same general design as the windows, and many of them in consequence appear like windows blocked up. They were often subdivided, again and again, till they became crowded, and very elaborate, as you may see at Henry VII.'s Chapel at Westminster.

The mouldings are few and shallow, very different from the varied, deeply-cut, and richly-ornamented clusters of previous styles; and the carving is of a less varied and interesting character. The rose of the Tudors is frequently introduced, as well as the portcullis of Henry VII., and the oak and strawberry leaves became favourite ornaments, carved in a mixed spirit of natural and conventional treatment. Pinnacles and turrets were common, and the latter assumed the ogee form of roof which we see at King's College Chapel, Cambridge, and at Henry VII.'s Chapel at Westminster. Towers were built of great magnificence, as at St. Mary's, Taunton, and roofs became lower of pitch, and surrounded by parapets, battlemented, panelled, or both.

Roofs were constructed of wood, often richly carved and ornamented with bosses, and the peculiar system of vaulting known as fan-groining was used in important structures, as for example, in the two chapels I have just mentioned, and at St. George's, Windsor. This method of design is distinctively English, and has special beauties, although I think it cannot be said to rival the earlier vaults for purity and severity of style.

The Perpendicular style, in fact, was losing these qualities in all its details, which were conceived in a spirit rather of freedom and exuberance than in that of dignity and lofty elevation. In its application to domestic work it was more successful than in other cases. Here freedom stood it in good stead, and gave to it a susceptibility for decoration which fitted it for any amount of magnificence that might be desired. At the same time the simplicity of the mouldings reduced necessary

outlay. Thus, there was found no difficulty in applying Tudor forms to every variety of building, from the castle or palace to the farm-house. The castle, indeed, in the stricter application of the word, was becoming an anachronism, and castellated peculiarities inconvenient. Old customs and precedents, however, still dictated the plans of buildings and the distribution of their adjuncts. The fortifications were abandoned, or became mere architectural ornaments; the walls of enclosure, within which might be gathered hosts of retainers, soldiers, or tenants, were no longer necessary. These outer boundaries, therefore, ceased to be built or maintained; but the inner buildings were still erected as before, with the hall as a central feature, around which the other apartments were grouped.

Changes arose in this arrangement, as time went on, until the hall lost its importance and became merged in the general mass of the building, as in many existing Elizabethan and Jacobean examples. Until now, the hall was the chief part of the whole building, to which it gave its name, and it was the result of feudal customs which were in course of gradual modification. The great landowner lived here in state, with his dependents gathered around him, all of whom lived at his expense, and looked to his table for their support. After the feast when the lord and his family withdrew to the solar, or private withdrawing room, the hall gave shelter to his vassals, by night as by day. They were not in a position to be exacting, having few rights which they could enforce against their lord, and being wholly dependent on his pleasure. The hall was at once the symbol of his state, and of their subjection.

We may thus understand that the decline in the importance of the hall marked an important epoch in English social life. It was indeed no less than the gradual enfranchisement of whole classes. Even the labourers began to live in houses of their own, or at least as tenants of their lord; and there arose also that great middle class, which has done so much for England, by standing between the Crown and aristocracy on the one hand, and the people on the other; and has thus powerfully influenced our history to the present day. These changes in society soon affected architecture. When there were no longer large numbers of dependents living in the hall, the size and importance of the latter might naturally be diminished, and instead of being almost the house itself, it shrank into a part of the whole, as an accessory, more or less distinct according to circumstances.

Meanwhile, the other rooms of the manor-house gained in importance. More refined manners demanded consideration. The hall could no longer be allowed to be used for sleeping in at night and private bed-rooms and dormitories were constructed in the larger houses or "halls." A common dormitory had long been a familiar arrangement in monastic buildings, and the beds in it were often divided by curtains or boarded partitions. Similar rooms were now placed in the upper stories for the use of servants or guests. Private bedrooms were at the same time multiplied, until they became as important as any other parts of the structure. In later times, indeed, they were decorated with much splendour, and we find to this day some of the most elaborate plaster ceilings of Elizabethan design in the bedrooms of the great houses of that period. Beds with drapery became customary, though they were still often made up on the floor, and placed two or three in a room. They were taken about from place to place, and it was incumbent on a servant to find his own bed.

Formerly, the servants in the castle of a great landlord included mechanics of all trades required for the building or maintenance of the structure. There were hosts of armourers, carpenters, masons, smiths, &c., as well as butchers, bakers, and the like. This circumstance will explain the necessity for the numerous buildings which clustered around the castle, and were protected by its

\* By Professor Barry. Fifth lecture. Delivered at the Royal Academy on Monday, March 19th.



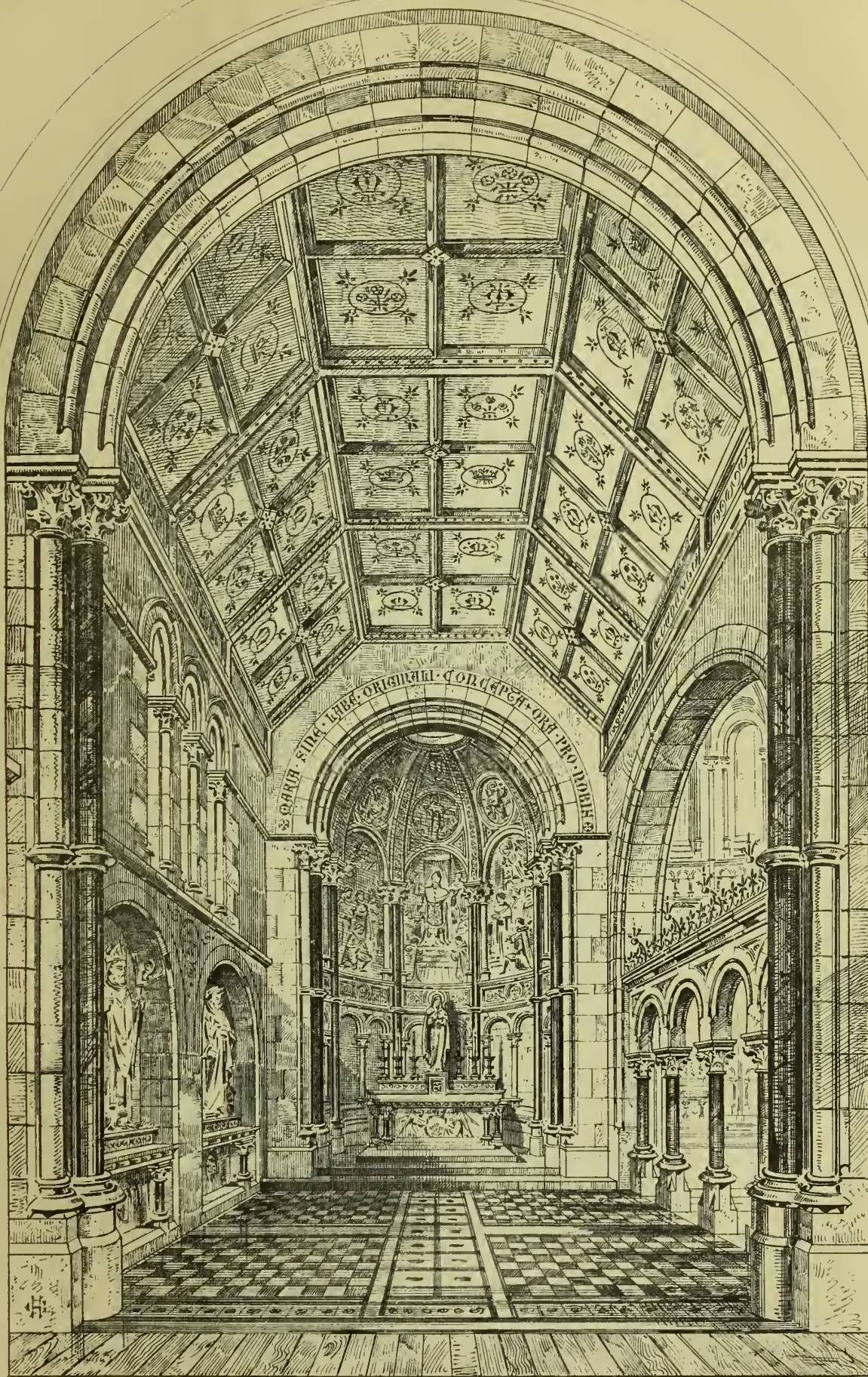


Photo Lith: The City Printing Co<sup>r</sup> 20 William St Dublin.

VIEW OF CHAPEL OF OUR LADY OF LOURDES  
CHARLEVILLE CH DUBLIN  
Geo. C. Ashmole Arch<sup>t</sup>



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enclosing walls. The custom lingered, but gave way before the increasing importance of the industrial arts, and the rise of the guilds and companies of traders to which I have before referred.

The increase of commerce not only led directly to wealth and national prosperity, but it indirectly softened the manners of a rough and hardy people, by acquainting them with the ways and experience of foreign countries. The trading classes were daily gaining in power, both social and political, and not only France and the low countries, but even India and the East, began to pour their treasures into London and the larger towns, which accordingly began to assume a corresponding importance. It was, doubtless, a distinct advance for the peasant to obtain a roof of his own, although of the humblest nature. Like most of the minor buildings of the time, his house was constructed of wood, with a thatched roof, and too often a single room served for all purposes. Many of the timber houses which we still find in Kent and other counties, were obviously intended for the use of persons above the rank of a labourer, such as yeomen or small farmers.

As roads were still bad, and communication difficult, there was little inducement for the workmen to go far for materials, and both in the country and in the towns, wood was still commonly used for house-building. Our ancestors were famous for their carpentry, and their fine church-roofs are unrivalled. In house-building they showed the same skill, combined with much taste for the picturesque. The walls were formed of timbers, and the spaces between them were commonly filled in with plaster, which contrasted agreeably with the colour of the wood. In some counties, as Lancashire and Cheshire, these old timber buildings still abound, and are usually called "Halls," a relic of the old fashion. In these cases, the wood has usually been painted black, and the contrast with the white plaster is, I think, rather startling than pleasant.

In town houses, the wood-work was often richly carved, and some of the projecting corbels and roofs are of great beauty. Supports or "spurs" abound at the sides of doorways, and helped to sustain the upper stories, which, according to the fashion of the time, projected beyond the line of the wall below. The ground-story was often of brick or stone, while the upper parts of the house were made of timber and plaster. We may judge of the beauty to which such architecture might attain by the remains of timber-work which exist at Bury St. Edmund's, York, Chester, Coventry, Shrewsbury, and elsewhere, and we may be sure that London, with its rapidly increasing trade and wealth, was in no way inferior to such cities. It is, therefore, a grave artistic misfortune for us that the Great Fire of London should have destroyed almost every vestige of Mediæval domestic woodwork in the capital.

From the upper part of each house projected the sign, which served the purpose of the modern plate-glass window and the name in gilt letters. There was no great display in shop-windows in those days. The stock exposed for view was not large, and shopping was carried on under difficulties, as may be seen in the caricature before you of shopping in St. Paul's Churchyard. The openings were of moderate size, usually closed with shutters, and sometimes, as in Cheapside, the shops were little better than sheds, one story high, built against the main walls of the house, to which they were attached. The sign was, therefore, of importance, and some of them linger, as we know, to the present day, such as the barber's pole and basin; the pawnbroker's three balls; and the bush for an inn where wine may be had. When the latter is good, however, the old saw declares that it "needs no bush," for as its virtues cannot be hidden, they require no proclamation.

The signs must have had their inconveniences in the narrow streets, to which, however, they added a quaint picturesqueness

of effect, in keeping with the architecture of the day. If they were a source of possible danger, from their tendency to fall on the heads of wayfarers, they were not likely, at any rate, to cause such serious accidents as the telegraph wires, which have lately been permitted by supine authorities to span our busiest thoroughfares, and to add new dangers to the streets.

A taste for the picturesque has always marked the works of English Mediæval designers, and has distinguished their work from the more stately and regular manner which found favour in France. The difference is doubtless connected with the varying taste of the two nations to which I have above referred,—the one loving the town, and the other delighting to make their homes in the country.

We have now arrived at a period of English history when our domestic Mediæval architecture had advanced to its highest perfection. The plans and arrangement of the houses had been enlarged and complicated to meet the advancing requirements of civilisation. At the same time, the changes had been gradual, and old fashions still prevailed and affected architectural forms. The country was still the home of the great lords of the soil; but palaces, both episcopal and lay, were arising in the large towns.

The chapel was still an essential part of a gentleman's house, although the eventual disuse of it might be foreseen, from the restrictions which were laid upon the services celebrated within it. Castles with their battlemented towers and lofty gatehouses, yet remained, and were even built or added to; but they were the signs of a state of society now rapidly passing away.

The time was ripe for change, and it was soon to come, introducing new ideas into the religious and social life of the day, and consequently affecting architecture in the highest degree. One of the most frequent signs of the times was the rise in importance of the great towns, closely connected as this was with the elevation of classes at which I have already glanced.

Having hitherto drawn most of my illustrations from the country, I now propose to give some consideration to town houses, and particularly to those of Old London. The changes in the great country-houses which were introduced after the disuse of Gothic architecture, and which constitute what may be roughly termed "Elizabethan," possess great interest and importance; but I pass these over for the moment, as I may possibly take another opportunity of speaking about them.

During the reign of Edward I., a remarkable series of towns were founded by the king,—not only in England, but also in his French possessions. The latter became known as the "English towns," and were termed "Bastides," in the French dialect of the district. They are remarkable for a regularity of disposition which we are a little apt to associate with Mediæval work. The streets are straight and regular; they cross each other at right angles; and the buildings are planned in regular blocks. The general aspect of the plan resembles, very nearly, the arrangement adopted in the modern cities of the United States. Although these towns are called in France the "English towns," it is possible that this title was given to them in compliment to the English king who founded them, and that the original conception may be due to France.

However this may be, they were carried out by English instigation and by English agency; for there is a letter extant from King Edward, while abroad, in which he desires that four proper persons are to be sent out at once from England to carry out his wishes. The letter was written at Bordeaux, and was addressed to London. In it the king especially declares that the persons sent are to be "the most clever and able, and those who best know how to divide, order, and arrange a new town, in the manner that will be most beneficial for us, and for the merchants, and who shall be ready and

willing to go for that purpose, wherever we may send them."

The plan of Montpazier, in the province of Aquitaine, is one of the most regular of the "English towns" abroad, and in England, Winchelsea was founded at the same time, and with similar objects. The market-place was in a central position, with arcades or cloisters round it. Near it was the church, with an open space for processions. The whole was surrounded by walls, with the usual gateways and towers.

The king showed great favour to these places, which became also known as "Free Towns." The inhabitants were released from all allegiance to the neighbouring lords, and held their property direct from the Crown. Trade being made free, they were enabled to carry on an extensive commerce, and as they became rich and powerful, they constituted a check upon the power of the bishops and nobles, and laid the foundations of municipal freedom. As their liberties excited jealousy, it was prudent that means of defence should be provided; hence the necessity of walls and ramparts. In times of danger, the most valuable property was placed in the church, and in some French towns the church was consequently fortified, as at Etampes and Dol, in Brittany, and also in the South.

The towns were founded by the king as a counterpoise to the power of his great feudal vassals, and they furnish a remarkable proof of the far-sighted wisdom of his policy. Strict orders were given that no one should be allowed to build a castle or fortress in the district attached to each town, in order that their independence might be preserved. Fostered by royal care, and thus favoured by privileges, the new cities grew and prospered, and became known as new or free towns, or in French, *ville neuf*, and *ville franche*. In England the buildings do not appear to have been quite so regular in their plans as in the French examples. At Winchelsea and Hull, both of which places were founded by King Edward, the sites presented peculiarities which doubtless account for such variance. There is, nevertheless, sufficient regularity in the distribution of the streets and blocks of houses to indicate the model on which they are based.

Hull was personally founded by the King, who saw the importance of its position, both as regards the possibility of invasion from abroad, and the commerce for which it was fitted. The land belonged to the church, but an exchange was effected, and the king lost no time in urging on the building of the town, to which he gave the name of King's Town, or Kingston, as it is still called. It has been more fortunate in after times than the sister town of Winchelsea.

The latter was placed on a new site, after repeated encroachments by the sea had almost destroyed the previous village or hamlet. The king or his advisers had formed large ideas of the ultimate importance of Winchelsea; but these were destined to disappointment, and the work was never finished. There is a fine church, partially completed, with a series of tombs, which indicate the fallen fortunes of the city. Within the first twenty years it was twice taken and pillaged; once by the French, and secondly by Spaniards, and from these calamities it never recovered. The walls, if built, have disappeared; but three gates remain, with segmental arches, and plain details. Some remains of the original houses may still be traced, and also parts of the vaulted cellars which formed their substructure. This mode of building was common at the time, but it has been thought that the vaults at Winchelsea were specially designed as depots for wine, as the French wine trade was even then considerable, and the position of Winchelsea was convenient for its prosecution.

The establishment of towns, and the privileges granted to the citizens, had a great influence upon the various trades carried on by the latter, and certain places became the head quarters of particular industries. Thus the woollen trade flourished at Northampton,



while Norwich was famous for worsted, Totnes for its clothing, and Beverley and Lincoln for their dyes, "Lincoln-green" having a traditional fame. As the various trades prospered, the traders naturally associated, and made rules for their common guidance. From such circumstances arose the guilds, and among the first of these societies in England appear to have been the Weavers', the Goldsmiths', the Fullers', and the Tanners' guilds. The members agreed to contribute to a general purse for common objects, and hence the derivation of "guild" from the Saxon word "gildan," to pay, or contribute.

The guilds were not, however, confined to trading societies; some were political, and became incorporated, by royal commission, for the local government of their towns, while others formed religious confraternities, devoted to purposes of charity, and mutual help. The trade societies are those which are now best known to us, as they still exist, although under different conditions from those which dictated their establishment.

The houses which were erected by the guilds, for the purposes of their societies, were among the chief architectural ornaments of Mediæval towns. Few, if any, remain in their original condition in England, although there are splendid examples abroad, as the Cloth Hall at Ypres.

The Guildhall in London is well known to you, and may serve to give some idea of the scale of such buildings, although its architecture has been too seriously interfered with to allow us to regard it as a perfect example. The Guildhall was the great common hall of the citizens, used very much as it is now, for public purposes, under the authority of the Lord Mayor; each trade, or guild, having its own separate hall and premises, like the various city companies,—their descendants,—at the present time.

In less important towns than London, the Guildhall of the ruling trade served also as the town-hall, or hôtel de ville, for the general public business of the citizens. In such cases a tower with a belfry was usually an adjunct. The liberty to erect such a tower was one of the privileges of the chartered towns, and was prized by the citizens, as the outward sign of their independence.

The towers and belfries in the towns of Belgium are among the finest structures of this kind, and their chimies have always been famous. It is recorded of Laon, in France, that the king, Philip VI., wishing to mark his displeasure with the citizens, ordered their bells to be sold, and directed that the tower should no longer be called the belfry.

Near to the town-hall was the market cross, a common and interesting object in English towns of any magnitude. They have been in many cases retained, and even restored; as, for instance, at Chichester, where there is a fine example, with a space around it for a butter-market. Some of these crosses served also as conduits, and at Lincoln there are remains of a reservoir, such as might supply a fountain, a feature unusual in this country, though well known abroad. In such towns the cross was placed at the point of intersection of the four principal streets.

The outer ends of the main streets were closed by gates, consisting usually of an archway, with flanking turrets. As the towns expanded, these gates were removed as obstructions, but their names often remain, as in London, where we are familiar with Aldgate, Bishopsgate, Ludgate, Billingsgate, &c. The last land-mark of this kind in London, Temple Bar, is already doomed, and I have therefore placed before you a view of it as it now exists, and also as it was before the Fire.

The streets leading from the principal gates were usually of good width, although the cross lanes and alleys were narrow, and further contracted by the overhanging of the houses. The latter were now frequently ornamented, not only by carving on the

wooden framework, but also by enriched plaster between the uprights, a mode of decoration more common, however, in Germany and France than in England.

(To be continued.)

## ADVERSARIA HIBERNICA,

LITERARY AND TECHNICAL.

IN these days of hellish foreign war and home, social, and sanitary schemes for the elevation of man, it is worth while now and again to take a look back to more disturbed times when other schemes and reforms were broached, both in the military and civilian interest, for like ends. In a Dublin periodical of 1793, several times quoted by us in the course of former notes, appeared an article entitled "Military Reveries," by Dr. St. John, of Waterford. This compilation is divided into several short notes, under sundry sub-headings, treating of military wants *re* fortifications, camps, health, uniform, accoutrements, music, arms, and discipline. Let us see how Dr. St. John proposed to fortify places towards the close of the last century, bearing in mind that the Rebellion of '98 followed in a few short years. The pike or the bayonet in these days was considered the queen of weapons; the old matchlock or "Brown Bess" was the glory of the red coat, and the murderous mitrailleuse and Krupp gun were undreamed of.

"Of 'Fortifications,'" writes Dr. St. John, "their situation should be directed by judgment, on rocks or elevated impregnable situations, near or surrounded by water, and adjacent to populous cities, or in passes, or to command some bridge. Such, for example, might be on an elevated situation to command the intended bridge at Waterford, the pass of the Suir between Dublin and Cork. Thus such strong and lofty fortresses in well-judged places through the kingdom would serve for barracks and citadels to the troops. The cities should be left open and defenceless, and the military alone should possess and reside in fortresses, which would be for them so many places of rendezvous and strength, whence they would scour the country and attack the troops of an enemy. In these places, the troops having everything planned, regular and military, we would find it easy to resist an enemy. Such places would not be inconvenienced by irregularity or enormous extent of fortifications, as is the line of defence round a large city; nor be crowded by the multitude of citizens and people pouring in from the country, as is frequent before a siege. Such places distributed through the country would be equal to so many eternal encampments, and equally useful in a winter campaign. But such fortresses should not be built or planned but in the best situations, and made impregnable; otherwise they may serve as so many fortresses to the enemy, if easily taken by surprise or storm. They should be rendered capable of sustaining the most formidable siege, and contain military alone."

Just as Dr. St. John was writing the above in 1793, the long-talked-of bridge over the Suir at Waterford was about being commenced. A ferry existed previously to the erection of this wooden and only structure that has connected the city of Waterford with the Kilkenny side of the river from that time till the present. This wooden bridge was the work of one Cox, an American architect, who also erected similar ones over other rivers in Ireland. George Semple, the architect of Essex Bridge, recently removed, in this city, once made proposals and drew plans for the erection of a bridge over the Suir where Cox's structure was raised.

Overlooking the Suir on the Kilkenny side there is a bold, broad, and high rocky elevation, well suited for a fortification or fortress—one, too, that commands the bridge and the river either way for long distances. On the Waterford side, too, the ground rises, and is considerably elevated at the old market place and further backward afield.

The passage of the Suir, neither in the

eighteenth century nor at present, would present little difficulties to an invading army from Milford making good their landing at Waterford or further down the river. If not opposed by superior forces, the central parts of Ireland would be soon reached,—in fact, the eastern and the south-eastern as well as other parts of the coast of Ireland is very poorly provided with defences, and, where nature has supplied almost impregnable ramparts, military genius has not utilised them, and is still neglecting to utilise them to the best advantage. Ireland at this moment is in numerous places at the mercy of an invading army, and there is only too much reason for believing that it all depends upon the colour of the invader whether in the case of a civil outbreak in Ireland he would not find hosts of friends to welcome him, instead of enemies to repel him. However, we shall not enter upon that question; we shall leave it to others to draw conclusions, and pass on.

Speaking of "Camps," Dr. St. John says: "It is to be debated whether the modern tents of our troops should not be abandoned, and others larger and more extensive adopted in their room, such as officers' marquees. Their appearance would be really splendid, their elevation convenient, and perhaps found proper for the troops. As the climate of Ireland is humid to excess, oilcloth for the marquees would be found most serviceable. Instead of straw, hammocks such as aboard ships, slung from the tent poles, should be used for the lying of the troops, as, on a sudden march or encampment, it is often difficult and inconvenient to forage for straw. Straw causes often much confusion, and is unmilitary, and an inelegant impediment in camp; but hammocks would be ever compact and easily transported; and the men, frequently obliged on long marches to remain under arms in wintry nights, would in these lie at ease, and refreshed."

Of late years some improvements have taken place in the formation of camps and the arrangement of tents. The plan of the disposition of the British and French forces before Sebastopol has been reckoned by some military authorities one of the best in arrangement, and it affords a good idea of a modern military camp. Apart, however, the formation of a camp and the arrangement of the tents and needful requisites must be always governed more or less by circumstances and the nature and capacities of the surrounding country. Food often becomes difficult to provide, let alone bedding for men and horses; and after a sudden surprise and a retreat, sides may suddenly be changed, and what was first the attacking party may find itself the attacked. If the regular army, so called, or the enemy make good its retreat to "cut and come again," the loss of all else other than lives, weapons, and ammunition may be after all but a small and temporary loss for the time being. In a rich and fertile country, in summer particularly, a strong and well-disciplined army will not long need food, fodder, and bedding.

The "Military Reveries" of Dr. St. John *re* "Health," are interesting, and perhaps in some particulars amusing, in the light of present-day military management. He was a sanitarian, as it will be seen, and some of his hints were worthy of adoption at the time. He observes—"The sooner a campaign begins in spring, and the sooner it terminates in autumn, the more healthy. The troops should be encamped on the side of a dry hill. A quantity of limestone should be burned, and on every Saturday or other stated day in the week, be thrown into the necessities to the rear of each regiment. The power of lime to dry up animal substances in fermentation is astonishing and immediate; and this would prevent putrid fevers and the contagion of fluxes. In a winter campaign especial care should be taken to keep the extremities of the body warm—the feet especially—by thick boots. The troops should not wear hats or felt caps, or cloth caps, by any means; nor cockades, nor plumes, nor feathers, nor tassels, nor



tufts of any kind upon their hats or caps; nor tufts upon their shoulders; for such groves of feathers, and felt hats, and plumes, and tufts, on a march, must retain much humidity; and, after a shower of rain a column of troops must be a long time exhaling the wet, and must more or less relax the vigour and spirit of the whole line of march. The leather caps worn by some companies of light infantry, well japanned, and without plumes, or cockades, or hair, or tufts, would be every way the most healthy, strong, and proper to defend the head from rain, and not retain the humidity. The tightness of the stock, and the breeches at the knee and round the waist, should not be continued. No stocks should be worn, the breeches should be loose at the knee, and at the waist; or the vest and jacket should, like the children, be made in one piece; or, the breeches being loose round the waist, should be buttoned all round to the waistcoat. Pepper given for two or three days to the troops before an engagement would render them less liable to fatigue in time of action; more quick, active, and successful. The troops should not wear flour, or starch, or grease in their heads; the hair should be cut short, and washed once a month, and kept as clean as possible, for their better health."

Since the worthy doctor wrote in the last decade of the last century, many rules and regulations have been introduced in the army respecting dress. The knee-breeches has disappeared since our forefathers' time, and its successor, the white trousers of our own early days, has also disappeared. After long years of laceration of soldiers' throats, and cruel chin uplifting, the hated stock has been done away with. About thirty years ago, or upwards, the white trousers in home service gave way to a blue substitute, and this again a few years since has been superseded by a dark trousers with advantage. The old white trousers looked well upon soldiers, and afforded a good contrast with the scarlet cloth. They soiled soon, to be sure; but washerwomen were plentiful and thankful in barracks. The head-dress of the soldier, too, has undergone a variety of changes within the last fifty years—some for the worse and some for the better. The pot hat, which we believe owed its introduction to the late Prince Consort, was both ugly and injurious to the soldier. As the old uniform of the regimental soldier comes in for some separate remarks from the pen of Dr. St. John, we must make it the subject of another note.

Speaking of "Uniform," our author considers that "scarlet is beautiful—it is the old English colour. The uniform should be arranged according to the looks of the line drawn out, rather than the individuals. Thus, it should be arranged in lines:—the first line should be black, their caps with glittering metal ornaments of stars, or medallions; the second, their facings their usual colour; the third, the capes coming across the breast, the colour of the facing of the regiment—green, blue, or whatever it may be—the edging of the cape a broad lace; the fourth, the jacket, arms, and body, scarlet; the fifth, the belt across the waist; the sixth, the breeches white, yellow, or aurora, or the facings blue or green, the gaiters white or black. Thus the whole line would have a most elegant appearance, like a rainbow with one range of colour under another. The troops should have their hair once a month cut moderately short; but no bobs or queues—it is most strange that military men whose business is to fight should spend so much time every morning putting animal's fat or white dust in their heads. The breastplates and the espintons are beautiful ornaments. The sash, as worn by the artillery, slung across, has an elegant air; but that being found inconvenient in battle, the method of wearing round the waist was adopted. Methinks it were more elegant not to wear at all. Buckles for the shoes of the military are a very complicated

machine, the tongue and anchor depending on a bit of wire, which may often come out of the ear upon a march. Clasps are a more simple and certain fastening for the shoes; if large and plated, they would look brilliant and uniform. The troops should not wear stockings, but merely gaiters; black cloth gaiters in winter, and white gaiters in summer. There should be no perpendicular facings on the regimentals; the facings should be a broad cape, the first line; the second the same colour across the waist and fore arms, or cuffs; these should be edged with broad gold or silver lace, or metallic spangles. The modern decoration of troops in imitation of lace, should give place to this elegance. The dress should consist of breeches, and waistcoat with sleeves; and in winter the troops should receive inside waistcoats, with sleeves of swanskin, and swanskin drawers, and two pairs of socks. There should be but one colour in each regiment. Having but a single colour, the valour of the regiment would be more particularly excited to preserve it. The colours of the infantry should not be unwieldy, nor so large as they are at present, but like a modern standard of cavalry. There should be also but one standard in each regiment of cavalry."

On "Accoutrements," Dr. St. John holds that "A single belt round the waist would be sufficient to hang both bayonet and pouch. This belt should be loose, and tied round the waist by broad straps of the cloth; the pouch made of tubes of metal closed together, and covered with a japanned leather pipe, should be hooked with slides on it, or buckled on it, on the right side; not hung by a cross belt from the shoulders, dangling awkwardly as the troops run in a charge."

As to "Music," "Arms," and "Discipline," we must postpone until another occasion our author's remarks.

It will be seen from what we cited already that even in military circles (where reform in uniform and other matters have until of late years been very slow), what a revolution has taken place as a whole in the course of the present century. Still one great and important matter—the sanitary requirements of the army—receive but scant attention even now. The health of the British soldier, and his health and comfort both in garrison as well as in the field, call for prompt attention. True, upon foreign battle fields within late years, hospitals have been better provided, and ambulances organised for conveying the wounded and sick, and the soldier has found good and sympathetic nurses. At home, however, barrack accommodation in numerous places is wretchedly bad; small, and ill-ventilated rooms, bad drainage, and bad or indifferent arrangements and sanitary accommodation in other directions. The surroundings of the soldier's wife in barracks calls for a speedy reform. Married soldiers' quarters should be in all barracks throughout the kingdom, and separate and more sleeping accommodation should be provided. Morality and sanitary reform must expand together. There can be no true morality without cleanliness, and we have not much faith in the regulations which, while enforcing outside cleanliness to a degree, perpetuates a system which produces a chronic uncleanness of mind, and other inexpressible vices.

#### THE CAXTON EXHIBITION.

As briefly announced in our last issue, the Caxton Exhibition opened on the 30th ult. at South Kensington. The daily papers have furnished the ordinary surroundings of the ceremonial of the opening. The exhibition, as a whole, is very interesting, and will well repay the little trouble and cost of a visit. Briefly described, the arrangement of the exhibits consist as follow:—Class A is devoted to the exhibition of the works of Caxton, and shows the development of the art of printing in England. This collection of Caxton's actual work is the most complete that has ever been attempted. Class B is

intended to show the development of printing in foreign countries commencing with the block books in use before the invention of printing from moveable types. Class C exhibits the same development, illustrated by specimens of the Holy Scriptures and Liturgies. This class is one of particular interest, and may be briefly described as a unique and magnificent collection, beginning with the Gutenberg Bible from Earl Spencer's library, and the Mentz Psalter on vellum from the library of her Majesty the Queen. Classes D and E include specimens of printing noticeable for rarity and beauty, commercial printing, and a curious collection of early printed newspapers. Class F is devoted to specimens illustrating the great varieties of music printing, while class G gives an epitome of the art of book illustration. Class H is occupied with autographs and portraits of authors, printers, &c.; and Class I contains books relating to printing, both technical and historical. Class K comprises curiosities and miscellanies. By the help of the type-founder, the printer, and the engineer, the actual processes of type-casting, composing, stereotyping, electrotyping, and printing are exhibited in operation in classes L, M, and N. Class O exhibits antique papers with watermarks, and illustrates paper-making by hand in actual operation.

In a general way we may add that the first objects that attract the eye on entering the building are specimen sheets of some of the oldest English newspapers of which copies are existing. The staircase is lined with a collection of about 300 prints of portraits of celebrated printers of all nations, classified in their respective countries, along with which are cases containing exhibits of every description of Bible and prayer book, lent by the different Bible societies, and specimens of type sent by the various founders. The first gallery contains the wondrous collection of Bibles lent by Mr. Stevens, Mr. Caspari's splendid prints, the value of which is untold, adorning the walls to the left, the right being occupied by specimens of every description of colour printing, and the finest collection of music in the world. Amongst the books exhibited in the cases in the centre of the room are a number printed in the East, in various languages, and the second edition of Shakespeare, being the identical copy used by King Charles I., and bearing his autograph, this being lent by her Majesty. In addition to this, there are the "Queen's Psalter" and the first Mazarin Bible, already mentioned.

On entering the "Caxton Room," we find eight cases filled entirely with the product of his press, to the number of about 150 volumes, some score of which are unique. There are also documents bearing upon Caxton's life, and giving the date of his apprenticeship, by which the date of his birth may be approximately calculated. Around the walls are hung portraits in oil of celebrated printers, whilst over the *dais*—which is ornamented with a trophy of flags—is Wehnert's painting of the Caxton press in Westminster Abbey. In the centre of this room are the two cases, containing what may not inappropriately be termed the backbone of the exhibition. The first is "The Recuyell of the Historiyes of Troye," translated from the French by Caxton, 1469-71; printed shortly after, probably at Bruges, in 1474. This work, lent by the Duke of Devonshire, is the first book ever printed in English. Caxton says of this that it was during the progress of this book through the press that he learnt the new art. In this copy is the autograph of Elizabeth Grey, Queen of Edward the Fourth. It was purchased at the Roxburghe sale in 1812 for 1,000 guineas. The other, felicitously termed "the foundation stone" of the present celebration, is "The Dictes and Sayings of the Philosophers," translated by Earl Rivers, and printed by Caxton in 1477. This is the first book from Caxton's press, with an indisputable date, with the printer's name and date of printing. This unique volume has been lent to the collection by Mr. S. Christie-Miller.



The printing machinery—a marvellous collection of printing plant, showing what has been in use for the last two centuries—is to be seen in the basement floor of the building.

What the exhibition may be financially, and bring substantially to the Printers' Pension Corporation, we cannot anticipate; but the request of the committee of the exhibition for loans of exhibits has, at all events, been highly successful, both in especial relation to Caxton in particular and the printing art in general. It would appear that some umbrage has been taken on the part of the working printers to the fact of the exclusion of the names of one and all of their body from the list of the committee of management. This exclusion of the toiling printer will not unnaturally be construed into a studied slight by some; but the least that can be said is, that it is certainly a serious mistake, and it is so considered by other of our contemporaries. The exhibition was not only organised to do honour to the memory of Caxton, but was got up for the avowed purpose of augmenting the Printers' Pension Fund, and therefore the working craftsman should be represented upon the committee in the person of one or more members of the trade. Apart from this mistake, we trust that the exhibition, while it remains open, will continue to be well patronised, and that at its close all parties will have reason to feel satisfied on the score of its success, not only as a practical exhibition of all that concerns printing technically, but in its financial outcome, for the benefit of that worthy object, the Printers' Pension Fund.

#### LAW.

#### ACTION FOR BUILDING SURVEYOR'S FEES.\*

SECOND COURT OF QUEEN'S BENCH.—June 26, 27.

(Before Mr. Justice Barry and a Special Jury.)

*M'Connell v. Kilgallen.*—This was an action by Mr. Henry M'Connell, building surveyor, to recover from Mr. Charles Kilgallen, builder, the sum of £142 1s., amount of fees for furnishing "bills of quantities."

Mr. Monroe, Q.C.; Mr. M'Laughlin, Q.C.; and Mr. Rynd, instructed by Messrs. Lawler, solicitors, represented plaintiff. The MacDermott, Q.C., and Mr. Bird, instructed by Mr. Davys, solicitor, appeared for plaintiff.

Mr. J. A. Rynd, in opening the proceedings, stated that towards the fall of last year it was proposed to erect a new R. C. church at Castlebar, County Mayo, from plans furnished by Mr. J. J. O'Callaghan, F.R.I.A.I. Advertisements were published seeking for tenders for carrying out of the work. At the request of the defendant, in response to an application by plaintiff, he was furnished with copies of the quantities as prepared by plaintiff. It was stipulated that the successful contractor alone was to pay the surveyor his fees of 1½ per cent. on the amount of tender and charges for lithography, and that the fees were to be paid out of the first instalment, and the cost of making tracings of the plans in Castlebar (then incurred by defendant) was to be deducted out of the total amount of the fees. Four tenders were sent in in response to the advertisement, all based on quantities supplied by plaintiff, with the following result, viz.:—William Kennedy, Westport, £11,800; J. Clarence, Ballisodare, £11,500; M. Harris, Ballinasloe, £11,250; Chas. Kilgallen, Sligo, £8,964. Mr. Kilgallen's tender was accepted, and a contract was signed by him last December. According to the terms of contract, he was required to commence the work within fifteen days from signing same. After the lapse of a considerable time from that date, defendant having shown no disposition to proceed, the architect wrote to him enquiring as to the cause of delay. The replies to his communications not being satisfactory to the architect, he, after the expiry of four months, took the work out of defendant's hands, as he was empowered to do by the contract, and commenced carrying it on by day work with the aid of a clerk of works. The surveyor now called on defendant to pay him his fees, as, had he (defendant) gone on with the contract, in the usual course of business he (defendant) would

have received his first instalment, and plaintiff would be entitled to his fees. Defendant promised, on his tender being accepted, that on the signing of the contract he would accept a bill at three months for plaintiff, which he afterwards refused to do, on the ground that he had not got an instalment. Defendant had, before receiving plaintiff's quantities, prepared quantities and estimates of his own from the tracings of the drawings before referred to, made by his son in Castlebar. Defendant now entered a defence to the action, after having received the quantities five months, to the effect that plaintiff was not to be paid until defendant received his first instalment, and also that the quantities were so badly prepared and so incorrect that they were useless to him (defendant). To this plaintiff filed a replication, stating that by defendant's own fault and neglect in not proceeding with the contract in the usual way, he had put himself out of the possibility of ever receiving an instalment, the work being taken out of his hands; and also that the quantities were correct. To this defendant replied by rejoinder that, even if this was so, he relied on the defence of the inaccuracy of the quantities. Counsel observed that up to the time of taking defence defendant never alluded to the inaccuracy question either to the architect, employer, surveyor, or anyone else, as a reason for not proceeding with the contract, either verbally or by writing; and it was not till an order had been made by the Court of Queen's Bench compelling him (defendant) to produce the particulars of alleged errors in the quantities, that he informed plaintiff of such alleged errors. He then sat down and commenced to re-measure the drawings on the basis of plaintiff's quantities, magnifying everything as he went along, and, before he got over the level of foundations, made out a bill of alleged errors amounting to upwards of £400. Plaintiff then carefully checked his work, directing his attention particularly to the alleged errors, assisted by two architects and surveyors and a building surveyor, who all agreed that the quantities originally supplied were correct, and those now put forward by defendant were grossly in excess and in error, and in fact were not such as could be endorsed by any honest building surveyor.

Mr. Monroe addressed the jury on behalf of plaintiff, observing the inconsistency of defendant's conduct in putting in a tender so much under the other three builders, which was purely his own affair, and was the result of his own "pricing," with which plaintiff had nothing whatever to do, all the estimates ranging from about £2,000 to £3,000 over his, being based on exactly the same quantities; also his never having alleged the question of inaccuracy as an excuse (although in his letters he had alleged several other excuses) for not going on with the work, until he was forced to make some plea by plaintiff's action, his preparing his own independent quantities, and never objecting to plaintiff's, although having them in his possession to compare for weeks before the signing of the contract, and the probability that it was the publication of the tenders that frightened him going on with the work; probably for this reason, that merchants from whom he might require goods for the work would not give him credit, finding him so much under the other contractors. Another suspicion is borne out by one of defendant's own letters, in which he complains of the publication of the tenders. At all events, he never suggested this question of errors until driven into a corner by the plaintiff's action. He thought he would make a bold plea such as the present, and get out of the disgrace he got into with Father Magee, the architect, and the committee, not having the slightest compunction for the injury he might do the plaintiff's character by such a reckless insinuation, independent altogether of the question of shirking his liability to pay plaintiff his just charge for the very troublesome and intricate work and labour performed by him, carefully and skilfully, at defendant's request, as he would be able to prove, he hoped, to the perfect satisfaction of the jury, whose verdict for his client he had confidence in obtaining.

Mr. Henry M'Connell, examined by Mr. Rynd—Am a building surveyor and measurer of several years' experience; prepared the quantities of buildings erected in various parts of Ireland; prepared the quantities of Castlebar R. C. Church last October; took particular pains with the work, which occupied about six weeks; got time extended for receiving tenders; swears they are correct; examined the list of alleged errors furnished within the last few days, which are grossly incorrect, and are simply a specially manufactured exaggeration of my own quantities; never heard any complaint or suggestion of the inaccuracy of the quantities until I was obliged to proceed with the present action; furnished seventeen sheets of lithographed detailed drawings, in order to illustrate the character of the work, and to give the contractors

tendering every information in preparing their estimates; it is not usual for surveyors to go to this trouble.

Cross-examined by The MacDermott, Q.C.—Witness, in reply to several questions put by the learned counsel, said he included the 3 ft. 6 in. course in the masonry of superstructure where it should properly be, and which would be to the contractor's advantage; stated in error that he took the masonry 9 in. short in height—superstructure,—but on examining his notes found he had taken it full and perfectly correct; proved that he had fully and properly measured the excavation, French drains, extra throw of excavation, &c., from the instructions of, and which was afterwards corroborated by the evidence of, the architect, Mr. J. J. O'Callaghan.

Mr. Wm. Stirling, architect and C.E., F.R.I.A.I., examined—Checked the disputed quantities in this case, and found them quite right.

Mr. Stephens, building surveyor, stated he checked a part of the disputed quantities, and found that plaintiff had taken them correctly.

Mr. M. Harris, builder, Ballinasloe, examined—Sent in a tender for this work; tested several of plaintiff's quantities before doing so; found them invariably correct; would be quite willing to undertake the contract at the figure sent in by him; never saw quantities taken out with more care.

Mr. W. Kennedy, builder, Westport, examined—Sent in a tender for this work; checked plaintiff's quantities thoroughly before doing so; found them quite correct and satisfactory; would be very glad to undertake the work had his estimate been adopted, and would be happy to pay the surveyor his fees.

Mr. Clarence, builder, Ballisodare, gave evidence to the same effect.

Rev. James Magee, P.P., Castlebar, examined by Mr. M'Laughlin, Q.C.—Was one of the contracting parties for the work, and entered into the contract along with the local committee for the erection of this church; was very much disappointed and annoyed at Kilgallen's conduct in backing out of his contract, as were also all the parishioners and committee; defendant never alleged as an excuse for not proceeding with the work that the quantities were wrong—on the contrary, he stated on the day of his signing the contract he had a good job, and would not give it up on any account; he was now proceeding with the work himself.

Mr. J. J. O'Callaghan, F.R.I.A.I., the architect of the church, stated he prepared the plans for this building; witnessed the signing of the contract; considers the bill of quantities a satisfactory one; never heard a suggestion of its inaccuracy until the present action was instituted; received great annoyance by defendant's not proceeding with his contract; wrote him several letters, and never got any satisfactory reply; was obliged eventually to take the work out of defendant's hands, and go on with it by day work, under the supervision of a clerk of works; this course of proceeding would involve immense additional labour on him (the architect); gave the surveyor, while preparing the quantities, various instructions, as stated by him, in reference to the treatment of the work; believed his evidence to be correct; defendant received complete copies of the drawings, which he has never given up, although frequently applied to for them.

Mr. Hugh G. Adair, Belfast, examined by Mr. M'Laughlin, Q.C.—Was Mr. M'Connell's assistant in preparing these quantities; signed, billed, and abstracted them; will swear the working out of them is quite correct.

Mr. John Murphy, Belfast, examined by Mr. M'Laughlin, Q.C.—Was plaintiff's partner when this work was done; will have no objection to my name being entered as co-plaintiff in this action.

Mr. Wm. Fogarty, examined by Mr. M'Laughlin, Q.C.—Am an architect and surveyor of many years' experience, also a Fellow of the Royal Institute of British Architects, and President of the Architectural Association of Ireland; checked over the alleged errors in this case, and found Mr. M'Connell's work correct; it would be utterly impracticable for two or any number of surveyors to come to exactly the same conclusion with regard either to the method of taking out their quantities, or the result of each item, unless they were working together; perfect accuracy is not to be obtained in preparing quantities, no more than anything else, but is nearer approached in measuring the work from the actual building when erected; agreed with the former witnesses that 5 per cent. would be a fair margin of deviation from the line of actual correctness—in some cases it might be under the proper quantities, in others over; could state with confidence that he never saw a more carefully-prepared bill of quantities, or a more accurate one, than the one at present under consideration.

Mr. John O'Hare, builder, testified to the complete and workmanlike manner in which these

\* Only a brief notice of this case appeared in our last issue, in consequence of pressure on our space. Those interested in the question are now presented with a fuller and more satisfactory report.



quantities were turned out, and stated that the margin of error allowed by the War Department over or under the actual quantity was from 5 to 10 per cent. on the gross amount.

This concluded plaintiff's case.

The MacDermott, Q.C., opened the case for defendant, stating that if the quantities were deficient what a hardship it would be on the contractor in carrying out the work, and referring to plaintiff's cross-examination, where he stated he took the superstructure 9 in. too short in height.

Judge Barry here interposed, and stated plaintiff said so in mistake, looking at the wrong dimension, and corrected himself afterwards, reading his (plaintiff's) evidence.

The MacDermott proceeded, stating that there were inconsistencies in the measurements given for French drains and masonry in foundations and superstructure; but the judge reminded him that the architect had stated he gave plaintiff instructions as to the way to treat these matters, which agreed with plaintiff's own testimony.

The defendant and his son were examined to prove the accuracy of their recently-prepared measurements, but on cross-examination it seemed the very first item—viz., surface excavation—was measured incorrectly, not having been measured from the original drawings furnished, but from block plan of site furnished after the quantities had been taken out, which was a subsequent contract, and which, as the architect stated, represented enormously more surface excavation than was intended originally, which was simply the ground occupied by the church itself. The theory on which defendant measured "extra throw" on excavations and excavation for concrete was stated by the architect and other witnesses to be radically wrong, and calculated to mislead and increase the correct quantities to a gigantic extent. Defendant was cross-examined also as to the inconsistency of his conduct in this case, in never complaining of error up to the time of action being taken by plaintiff, and it was insinuated by counsel this was a sham defence, set up to cover his conduct in receding from his contract, and to endeavour to relieve himself of his liability to the plaintiff, by which he was not ashamed to put forward a plea which, if left uncontradicted, might ruin the plaintiff's professional character for years.

The counsel on both sides consented to abandon their respective rights of addressing the jury, owing to the peculiar nature of the case, and the time that had already been occupied.

Judge Barry then summed up, recapitulating the facts of the case, and stating that they had on one side the evidence of the plaintiff himself (a building surveyor) and of a number of skilled professional witnesses, such as Mr. Fogerty, Mr. Stirling, and Mr. Stevens, &c., architects, surveyors, and builders, all testifying to the ability and accuracy of Mr. McConnell as a surveyor, and the excellence of his work in the present case; and against that they had the evidence of the defendant and his son, who did not appear to be building surveyors at all, and were very much interested in finding Mr. McConnell wrong; and it was for them (the jury) to choose which side they would prefer. It was a remarkable fact that struck him (the learned judge) in connection with this case, that three other builders who tendered for this work on the very same basis as defendant—viz., the quantities furnished by plaintiff—in remote parts of the country, separated from one another, and who were perfect strangers to each other, should be so much above defendant, ranging from £2,000 to £3,000, and practically so close to one another. Should the jury find for plaintiff, they were to deduct £10 for defendant's expenses for copying the plans at Castlebar, which was a stipulation on the face of the agreement; and the issues which they had to find were two—viz., were the quantities inaccurate, and had a reasonable time elapsed for going on with the work prior to the action being brought. It was not necessary that plaintiff's work should be done to perfection, for there was no such thing as perfection; but it was necessary in law that it should be done with reasonable skill, care, and accuracy, to the best of his ability, and devoid of gross carelessness or negligence.

The jury then retired.

It was suggested by the learned judge during the course of the trial that this case might with propriety be left to the decision of an independent surveyor; but the plaintiff stated that it would cost nearly as much more as he was claiming to get all his work checked by a second surveyor, and, as he seemed willing to abide by the verdict of the jury, the case was proceeded with.

The jury, after fifteen minutes' absence, returned into court, finding that the quantities supplied by plaintiff to defendant were correct, and of service to defendant in preparing his estimate; and that defendant had a reasonable time for proceeding with

the work prior to the action being brought, and found for the plaintiff in the sum of £132 1s., and costs of action.

## LABOURERS' COTTAGES AND FARM BUILDINGS.

IN the report of the judges appointed by the council of the Royal Agricultural Society of Ireland to inspect the drainage and cottages that have been entered in competition for the prizes offered by the society for work done in 1875-6, we find the following description of some cottages erected in Stradbally, Queen's County, which obtained the provincial gold medal. Captain Cosby, on whose property these cottages were built, also received a prize for the greatest quantity of drainage work:—

The only cottages entered in the province of Leinster are a lot of four cottages in the town of Stradbally, on the property of Captain Cosby. These houses, which are built in a very superior manner of rubble masonry, with cut limestone jambs and lintels to doors and windows, present a substantial, as well as neat external appearance. They are covered with red Roman tiles, with eaves projecting, and faced boards to gables; have cut stone chimney shafts; have dormer windows to light the bedrooms in centre houses, and gable windows to bedrooms in end houses. Internally the plan is much the same as other cottages on Captain Cosby's estate which have competed in former years, and consists of kitchen on ground floor 15 ft. by 13 ft., with two bedrooms over 7 ft. 6 in. by 13 ft., approached by a good closed-in staircase, 2 ft. wide. The kitchens are floored with good cement concrete, and are well supplied with cupboards, shelves, hooks, &c., which are much to the comfort of the occupiers. The offices are in a separate yard to each house, and are good, but in the two middle houses are difficult of access. They are covered with boards, and over the boards a layer of cement concrete, about 2½ in. thick, which is found perfectly water-tight, and so far satisfactory. These houses are not quite so convenient as we might wish for cottages with so much external pretension, but the object which Captain Cosby had in view, and which it is stated in his report he has attained, has been to build a house that will pay, and it was considered that any greater accommodation would add too much to the cost. We think it a pity that for the sake of the small saving of one gable effected by putting four houses into one block, and where land was of no material value, these houses should have been put into a block of four instead of two. If put into two blocks the light and ventilation both above and below might be better regulated, and access to the rear could be more satisfactorily adjusted. As they are now, it has been found necessary in the two centre houses to put a back door in the kitchen, causing a great thorough draft and detracting much from the warmth of the room. These houses are well finished, the masonry is beautifully done, and the carpentering is well done, and of good seasoned timber; and although we cannot give them unqualified approbation, we consider them of sufficient merit to entitle them to the prize. These houses were built by contract for a sum of £318 13s. 4d., or £79 13s. 4d. for each house, including offices. The entire area of these four houses, external measure, is 17,504 ft., and the cost per foot is 4s. 4d. nearly, and the internal area of each house is 3,120 ft., and the cost per cubic foot is 6d. nearly.

The council in their report regret that so much apathy should appear to exist in competing for these prizes, as they are aware that this does not in their opinion betoken the actual state of improvement of property in Ireland. That an apathy does exist is apparent from Captain Cosby's being the only cottages entered for the province of Leinster. We believe that Captain Cosby was awarded a prize or prizes at the previous year's competition, so he seems to have the field, and the prizes all in his own hands. It is a question whether the Royal Agricultural Society should award their prizes on occasions when only one competitor entered the lists. We find by the report of the society that the wages of able-bodied labourers in the Queen's County district mentioned is only 2s. a day, without house or perquisite of any kind—a miserable remuneration, we think, in this day of boasted landed improvement.

The builder of the cottages referred to, says the *Leinster Express*, is Mr. Maurice

Murray, of Stradbally. The overseer of Captain Cosby's drainage works was the late Mr. Patrick Byrne. Mr. T. W. Webber was the architect of the cottages and the engineer of the drainage, and the works were carried out under his superintendence.

In our notices of the report of the Commissioners of Public Works in Ireland, we will have something further to say on landed property improvements.

## "PADDLE YOUR OWN CANOE."

Our countryman, Henry M'Cormac, M.D., of Belfast, makes the following suggestions in a letter wherein he proposes paddling the water as a means of averting drowning. As the preservation of human life is an all-important consideration, whether obtained through self-exertion or sanitary efforts apart, we think it will not be amiss to give a wide publicity to Dr. M'Cormac's remarks:—

"As a rule subject to a few exceptions, persons precipitated into the water do not swim without previously learning. But paddling with the hands and treading with the feet require no prior instruction, and in the great majority of cases would save life. In swimming, the mouth is on a level with the water in the intervals of the strokes; in paddling, the head is well elevated, the individual is able to look about, he can deliberate as to what is best to be done, and he is much less liable to take water into the larynx or glottis, a casualty which I am persuaded causes the destruction of many. Without prejudice to the art of swimming, I would have children exercised in household tanks, from the tenderest age, in the act of paddling and treading water, so as to impart the confidence which unreasoning dread tends to lessen or take away when one is suddenly immersed in an unusual medium. The animal, the quadruped, begins to paddle at once when cast into water, but as man does not habitually employ the anterior limbs as organs of locomotion, reason must tell him that he may, if he pleases, employ them as organs of locomotion, in the water, just as readily as any four-footed animal. To be sure, a man has not the habit of using his hands and arms for locomotion, as the brute has, but otherwise how much more available is the paddle-shaped hand than a hoof or paw! Again, the man, with little or no instruction, by throwing his head well back, can float and rest at pleasure, a thing of which the brute has no conception whatever. Animals not habituated to the water, will often take to it spontaneously, or, if cast into it, sustain themselves for indefinite periods. A horse, during disembarkation in Portugal, fell into the sea, and paddled about the harbour for a matter of six hours before it was secured. Washed or thrown overboard, the lower animals have been known to float for a long time. I knew of a mule which, having been washed overboard in the Bay of Biscay, paddled itself ashore, and then crossed a country a couple of hundred miles to its previous quarters. The staff surgeon in charge told me that, after leaving the Peninsula, the horses of the troop had to be thrown overboard in order to lighten the ship in a gale. The poor things, when they found themselves abandoned, faced round, and so long as the ship commanded a view, were seen to battle with the wrack and wash for miles. A man on the coast of Lincolnshire, mounted on an old grey mare or other horse, used to swim seaward to vessels in distress, and thus rescued many lives. Recently, nigh Brooklyn, U.S., a dog took the water, and paddled, it is said, forty miles in search of his master. Dogs often gain the shore when ships and their crews have been lost. Some years ago a dog landed at the Cape of Good Hope with a letter in his mouth. The vessel to which he belonged had gone down with all hands, but if the men had but paddled as the dog paddled, all their lives might have been preserved. Indeed, I know for certain that formerly it was the practice at the Cape for men to paddle out—it was termed treading water—and bear communications to and from vessels in the offing when no boat could live. It was, and I believe is still, the case at Madras, similarly. Natives of the Island of Ioanna, in the Mozambique Channel, treading water, come out, bearing fruit on their heads, to the vessels miles distant. The young people in the islands of the Pacific breast the gigantic breakers out of mere sport. The Indians of the Upper Missouri traverse the impetuous current, invariably paddling and treading water. Short instructions for paddling and treading water ought to be posted up in all schools, barracks, and bathing-places; wherever, in short, people have to do with the sea or with masses of water. It should be shown how easy it is, with a little well-directed



effort, to preserve life, and how the yearly and calamitous destruction which besets our shores now and happily for all time to come might be effectively stayed."

### THE BARROW DRAINAGE.

THE works on the second division of the proposed Barrow Drainage, now known as the Rathangan works, were commenced by the contractors last week. The Rathangan Drainage Board, being anxious to forward such a useful work, have entered into a contract for the completion of the work in three summers, for the sum of £34,000. The highest tender was £43,039, and the lowest £31,000. The work, for the most part, consists of some thirty miles of new river excavations, and the erection of numerous bridges, aqueducts, syphons, &c., thus securing employment to two thousand men. The works on the first and second divisions of the original Barrow project being now in progress under the same engineer (Mr. James Dillon), some of the landed proprietors have taken steps to enable this gentleman to commence other divisions of the works before it is too late. It is admitted the Monasterevan division of the original project should not be left untouched, while the works in the upper division are being proceeded with, and at the request of some of the landed proprietors, Mr. Dillon, who has designed, and is now carrying out, some of the largest river works in Ireland, has lately been engaged in taking observations of the rainfall and flood discharges of the district.

### THE DOMESTIC ECONOMY CONGRESS.

ON the 17th, 18th, and 19th inst., under the auspices of the Society of Arts, and in connection with the educational institutions of Warwickshire, Worcestershire, and Staffordshire, a congress will be held in Birmingham. The object is with a view to the introduction of domestic economy and cookery as a branch of general education, especially in the general and elementary schools throughout the country. A great variety of subjects will be discussed in the three sections into which the congress is divided. Papers will be read by a number of distinguished sanitary and social reformers and professional gentlemen and ladies who have previously taken part in the proceedings of other congresses. The principal papers will comprise the subjects of Food and Cookery, Household Management, Health, Cleanliness, Thrift, Sickness, Warming and Ventilation, and a number of other cognate topics.

### GABRIEL BERANGER'S TRIP TO COUNTY WICKLOW.\*

OCTOBER 9th, having received our orders from Colonel Burton, I set out with Mr. Bigary at 9 in the morning, being a rainy day; passed through Milltown, a village two miles from Dublin, and by the castles of Dundrum, three and a-half miles; and Kilgobbin, five and a-half miles from Dublin; passed through the Skalp, which is certainly a mountain split in two by some earthquake, or other revolution, time out of mind; the road is at the bottom of the split, and in each side rises to a great height; the parts of the mountain once joined being a composure of rock, in some places the convexes are visible on one side, and the concaves which contained them on the other; immense rocks, sticking out, supported by stones of smaller size, seem ready to tumble down and crush the amazed traveller; it gives an idea of the work of the giants heaping Ossa upon Pelion; the rain and wind prevented our stopping to draw a view of it, which we referred to our return. The Skalp is eight miles from Dublin. Arrived at Tinnahinch, small village ten miles from Dublin, almost drowned; went to the inn, where was neither fire nor a drop of spirits; got a fire made, but no spirits to be had; took each a pint of strong white wine, undressed and dried ourselves as well as we could at a fire which would not have

broiled a sparrow; the horses having baited, set forwards; passed by Roundwood, a hamlet, and quitted the high road about eighteen miles from Dublin, turning to the right, which road is so bad and rocky that we were obliged to alight, the servant leading the horses. We arrived at a ford [probably Laragh], where we found several horsemen, the river, or rather torrent, running with such rapidity, that no one dared to cross it; we halted also, not knowing what to do; at last two countrymen mounted upon one horse took courage, and went in; but being just past the middle, the force of the water threw down the horse, but keeping hold of him by the mane, he swam on shore, and they were saved; this was no encouragement for any of us to follow, but the servant insisted it could be done; he went in, crossed safely, and came back to bring us over, we mounted in the chaise, and he riding before, went in after him; when we were in the middle, our horse, frightened by the noise and waves of the torrent, refused to go on; the servant took hold of his head, and we gave him the whip, but notwithstanding he kept us some minutes in the greatest anxiety, and fear of being drowned; at last we conquered him, and went over, followed by a string of horsemen, who all came over safe. About half-a-mile further, in sight of Derrybane, the residence of James Chritchley, Esq., we met another of these torrents, over which a bridge is begun; but as the piers for the arches are only finished, the same obstacle kept us for some time consulting; and again, encouraged by our servant, followed him, and arrived safe at Derrybane, past five in the evening, where, by the care of the good family, we found ourselves so comfortably that Mr. Bigary said to me, he thought himself again in Connaught. As it was dark before dinner was over, did not do anything this day.

October 10th, fair day, went with Mr. Chritchley to the Seven Churches, distant half-a-mile; drew and plan, and came home sooner as it began to rain.

October 11th, storm and rain all day; could not stir out of doors, worked at our sketches.

October 12th, showery day, set out with Mr. Chritchley, and worked at the monastery; and as the river, which surrounds part of the churches, was not then fordable, went to Prince's Church (the Reafort), near the lake, drew and plan; dugged under a stone with Greek characters, but found nothing; came back to a hill facing the churches (on the south side), where, on the declivity and shelter of a rock, we ate a good cold dinner which Mr. Chritchley had ordered to be brought there; the road to the Prince's Church, near the lake, is in rainy weather a continued bog, and one is obliged all the way to leap from stone to stone, which have been put there to prevent one sinking.

October 13th, set out before breakfast, and finished at the monastery; after breakfast went to the Churches, the river being fordable on horseback; worked there the whole day, though often obliged by showers to shelter. Mr. Chritchley came for us in the evening; got home through a heavy shower, almost drowned.

October 14th, rain and wind all day, no stirring abroad, worked at our sketches.

The Seven Churches, described by Sir James Ware, are situated in a small valley surrounded by high mountains, near a small lough, divided in two parts by a long flat slip of land; part of the churches, viz., Cathedral, Kevan's House, Priest Church, and Lady's Church, are in the valley, and surrounded by a river, which after rain is not fordable for a horseman. Prince's Church, on this [south] side of the river, is situate near the Lough at the foot of a hill; the monastery, also on this side the river is nearer to Derrybane, in a field on the edge of the river; a few houses are scattered in this valley, but no accommodation can be got there.

October 15th, cloudy day, set out for the Churches; worked, though interrupted by showers; a very heavy one obliged us to take shelter under the door of Lady's Church, which being unroofed, had only the thickness of the wall (three feet) to cover us, here we had a fine view of the Lake, with the effect of the sun darting its rays through a cloud, and lighting only one side of the mountains, leaving the rest enveloped in darkness; which I drew. The shower being over, continued working and finished all, after which we adjourned to Kevan's House, where we found a dinner which was sent us from Derrybane; dined on the stone altar, and when done left the servants to eat their dinner, and adjourned to a closet or chappel annexed, to drink our bottle; returned in the dusk to Derrybane. Storm and rain during the whole night.

October 16th, fair, but the river not fordable until past 12. Took leave of Mr. Chritchley and family; went on slowly, past safe the two fords, and stopped to bait at Enniskerry, near Tinnahinch. Our servant here told us that he had made a recruit of Lord Powerscourt's coachman, and that they would both keep close to the chaise, as it should be

dark before we arrived in Dublin, and that road being frequented by robbers required us to be on our guard; accordingly we set out, but could not stop to draw a view of the Skalp; night overtook us at Milltown, where our servant discovered two suspicious fellows in the road, who would not stir, though called to, to go out of the way of the carriage; but on showing my pistols, they stepped aside, and we arrived safe in Dublin in the dark.

Glen-da-lough, Co. of Wicklow, 22 miles from Dublin. This place is known also by the name of the 7 Churches, which appellation it has received from the remains of as many consecrated buildings in its neighbourhood, which are still visited and revered by Roman Catholics; the Churches have been described often, and views of them published. I here present only a view of the Lough; it is situated at the end of an extensive glea, surrounded by mountains, which gives it the appearance of the bottom of a well, where the rays of the sun penetrate some hours latter than in other parts of the country. This spot is uninhabited, wild and romantic; a long and narrow slip of ground seems to divide the Lough in two parts, but I believe the separation to be only apparent, as the water on each side this slip of ground is equal in height, and the slip itself so soft and hoggly that it could not bear my weight, as I sunk in it to the knee on the very first step I made, to try to cross it. This view was taken in October, on a stormy and rainy day; some rays of the sun, escaping through the black clouds and illuminating one side of the mountains, produced the fine effect here represented, and induced me to draw it whilst I was sheltering under a small door in a thick wall of one of the unroofed Churches.

### HOME AND FOREIGN NOTES.

THE WHITESIDE MEMORIAL.—A meeting was held a few days since in this city, at the Provost's House, in order to organise a testimonial to the late Chief Justice.

STEAM ON TRAMWAYS.—At an early hour on Saturday morning a street locomotive with an ordinary tramcar attached, made an experimental trip from the Kingsbridge terminus to Westland-row. During a portion of the journey the speed attained was at the rate of twelve miles an hour.

"TO WHAT BASE USES!"—It is said that an enterprising gentleman conversant with the Aberdeen dead meat trade, proposes to form a company to purchase the military barracks at Athly from the Government, and to convert same into a slaughter-house for the cattle of Kildare and adjoining counties.

CLEOPATRA'S NEEDLE.—An Alexandria letter in the *Cologne Gazette* states that on laying bare the socle of the obelisk about to be removed to London, Mr. Dixon discovered a Greek and Latin inscription to the effect that Barharus, Governor of Egypt, erected the obelisk, through the architect Pontius, in the 8th year of Augustus.

KINGSTOWN.—At the meeting of the Commissioners on Wednesday, on the motion of Mr. John M'Evoy, seconded by Mr. Reilly, it was resolved that steps should be taken in order to ascertain if the site for the new Town Hall could not be obtained free; also that Messrs. Meade and Son (whose tender for the erection of Town Hall and Courthouse has been accepted) be requested to furnish a detailed estimate of the works in connection therewith.

THE BELLINI MONUMENT.—A monument is to be erected to Bellini at Naples, and a committee has been formed to carry out the project. It has invited competition, but from Italian sculptors only. The conditions are that the cost is not to exceed 30,000*l.*, and sketches at least 40 in. in height are to be sent to the secretary of the committee at the College of Music, Naples, before the end of the year.

THE BRUNEL STATUE.—The masonry in connection with the bronze statue of Brunel on the Thames Embankment, which has been for several months in progress, is now completed, and the ceremony of unveiling the statue will be performed in a few days. The site selected is the vacant piece of ground at the south west end of the Temple Station of the District Railway, at the bottom of Surrey-street.

CREMATION LEGALISED.—The Paris Municipality, on the recommendation of a committee, has agreed to petition for a law permitting cremation, though one member argued that the practice, not being forbidden, was already lawful. The Prefect objected to a second recommendation of prizes of 25,000*fr.*, 15,000*fr.*, and 10,000*fr.*, for the best plan of carrying out cremation—considering the sums too large; and this was referred back to the committee.

\* "Trip to Glandalough, or Seven Churches, County of Wicklow, in 1779." From Sir W. R. Wilde's Memoir, published in the "Journal of the Royal Historical and Archaeological Association" for July, 1873.



**THE DRAINAGE OF MARYBOROUGH.**—At the meeting of the board of guardians of the Mountmellick Union (Mr. Vanston in the chair), the tender of Mr. J. J. Long, Dublin, for the main drainage of Maryborough was accepted at £700.

**THE PROPOSED CHANNEL TUNNEL.**—A provisional association, formed for constructing a tunnel under the British Channel between England and France, has held a meeting in Paris, to receive a report on certain geological explorations and soundings executed last year. The report stated that the clay of the zone through which it was proposed to carry the tunnel was perfectly continuous and homogeneous, and the engineers concerned considered the contemplated tunnel quite practicable.

**MANCHESTER TOWN HALL.**—The City Council has resolved not to sanction any expenditure upon the mural decorations of the new Town Hall until a report has been prepared showing the amount of expenditure already incurred in erecting and furnishing the building. Mr. Alderman Lamb said the ratepayers were anxious to know whether or not there was any truth in the report that the expenditure up to the present date amounted to nearly £1,000,000.

**THE "ROYAL" DRAWING ROOM, HAWKINS-STREET.**—One of the extensive and splendid apartments (says old *Saunders*) attached to the Theatre Royal, and entered from the arcade, is now being most tastefully fitted up and embellished by Mr. Michael Gunn, the enterprising lessee and manager, to serve as an "Entertainment Saloon." It will be opened on the 23rd inst., when Mons. Buatier, the famous sleight-of-hand performer, will make his first appearance. He will work out some of his unaccountable illusions, and exhibit here for the first time the marvellous figure "Altotas," of which much has been spoken and written. The new saloon is sure to be popular, because of its central position and its fitness for musical performances and exhibitions.—What next?

**IRON PAVING.**—By permission of the Commissioners of Sewers of the city of London (says the *Builder*), a portion of the new wood paving in Beech-street has been charged with iron (3 cwt. to the square yard), by way of experiment, to increase the durability of wood and preserve and protect it from heavy racking traffic, and to test the practicability of securing small blocks of iron without framework, and so as to deaden noise and counteract the other disadvantages of metal as hitherto applied. The ordinary wood-paving blocks are bevelled by machinery on the upper and lower edges, and between each row is laid a row of cast-iron blocks of doubled-wedged section, thicker at the upper and lower surfaces than in the centre, so as to fit mechanically between the bevelled wood blocks which, on section, are thicker in the centre than at the upper and lower surfaces. The iron blocks weigh 16 lb. each, are rounded and serrated on surface for foothold, and perforated for grouting material, and are bedded in sand on the ordinary concrete bed. The designer and patentee (Mr. Dennison, architect) maintains that the cost, though heavy at first, will not, in the long run, exceed either granite, wood, or asphalt.

**DRUMACHOSE NEW PRESBYTERIAN CHURCH, LIMAVADY.**—This new and handsome building, which has just been completed, was (we are informed by the *Coleraine Chronicle*) formally opened for divine worship on Sunday 1st inst. Drumachose church was originally built in 1746; but in 1876 the members of the congregation, finding it to be too old and dangerous for the use of public worship, resolved to erect a new church, which they at once set about, assisted by the promise of funds from friends belonging to the congregation, as well as from those in other parts of Ireland and in America. The church is lighted by four large and beautiful windows of stained glass, one at each end of the four wings of the building, the framework being of freestone of *massy and architectural* design, there being besides twenty-one other windows, including the spire, which has six. The seating of the church is of the best red pine, beautifully polished, the pulpit and doors being of the same material. The pews are made in the newest and most convenient style, being open with low backs, which are a great improvement to the old-fashioned pew or stall, with its high back and sides, and entrance door forbidding the entrance of non-occupants or strangers without the leave and licence of the owner. The official lighting of the church is also very admirable. The heating arrangements [in summer] have been carried out to the comfort and convenience of the congregation. Altogether the church is one of which the minister and members may feel proud, as it will be, when the outside plastering has been completed, one of the *most elegant and most carefully constructed* churches in the North of Ireland. [The architect's name is not given.]

## TO CORRESPONDENTS.

H. M.—Your communication as to the unsanitary condition of houses in Dalkey is to hand. Such a state of things is much to be deplored. You have taken a very wise course, and one we should be glad to see generally adopted. It might be the means of bringing sleepy sanitary officers and landlords to a sense of their duties. A similar complaint as to Blackrock Township reaches us. We were not much astray when we stated some time ago in this journal that "many of the representatives of the people in local boards and unions have a personal interest in opposing sanitary reform, and officials acting under are not independent enough to speak their minds. A faithful report would often go to prove that the greatest offenders against the sanitary laws are the members of local boards and guardians of the poor; but sanitary officers do not like to blurt out the truth about the evil doings of their masters."

"UNKNOWN DUBLIN."—The author is "alive and kicking," and in reply to one or more correspondents we have to say it is his intention to resume his series of articles at some future date. Copies to complete sets of the volumes in which the articles appeared can still be had at our office. RECEIVED.—H. B.—Assistant Surveyor (will be attended to)—R.H.A. (Thanks)—An Actor—P. C.—S. B., &c. Some papers intended for insertion in this issue we are obliged to hold over.

## NOTICE.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

Correspondents should send their names and addresses, not necessarily for publication.

It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.

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Illustration.

SCOTTISH WIDOWS' INSURANCE BUILDINGS,  
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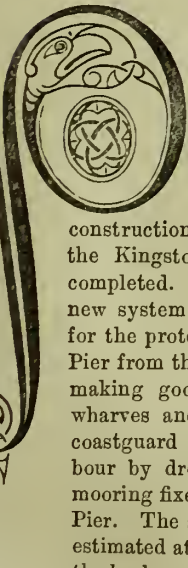
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THE IRISH BUILDER.

VOL. XIX.—No. 423.

PUBLIC WORKS IN IRELAND.\*

SECOND NOTICE.



ASSING on to the Appendices, the report of Mr. Robert Manning, the Chief Engineer, shows, amongst works of maintenance and execution in relation to harbours, that the re-

construction of the "Wolf" Jetty at the Kingstown East Pier has been completed. These works included a new system of fenders and sheeting for the protection of the Mail Packet Pier from the collision of the packets; making good the inner faces of the wharves and parapets; repairing the coastguard slips; deepening the harbour by dredging; and a new screw mooring fixed in the bight of the East Pier. The amount of damage done is estimated at £1,500. The dredging of the harbour continued during the year, and a quantity of 22,421 cubic yards dredged. Considerable damage was done to the works at Howth Harbour. Here, as at Kingstown, the damage commenced from 10 ft. to 14 ft. above the level of high water, the sea tearing up the old rubble pitching, and washing out the hearting, leaving, however, the new work below it uninjured. The damage here is estimated at £5,000. The storm and waves at Donaghadee Harbour inflicted a damage estimated at £1,500. At Dunmore the damage done by gales was to the extent of £300; and at Giles' Quay, County Louth, the damage was £500.

A succession of heavy damages at our Dublin and contiguous harbours, and at other fishery piers and harbours, suggests a new method of reconstruction of a more solid and binding character. Any new departure, even if more expensive at first, will be a

\* "The Forty-Fifth Report from the Commissioners of Public Works in Ireland," &c. Dublin: Alexander Thom. 1877.

saving in the end, for the yearly destruction of so much new or repaired work does not sound satisfactorily. If good work becomes better through lapse of time by the induration of the mortar, cement, or concrete used, therefore some precaution should be taken while the work and materials are fresh to give them an increased temporary protection. Heavy gales are always certain, though their time of occurrence may be uncertain.

At Ballyvaughan (Bournapeaka) Pier, County Clare, during the past year the contractors, Messrs. Mannix and Slade, commenced the works, which are now proceeding. At Rathmullen Pier, County Donegal, Mr. W. J. Doherty commenced the works of this pier, and completed it during the year. At some other minor fishery piers and harbours works of repair are being prosecuted.

In connection with the repair of county roads, that of Blackrock—the condition of which was often a matter of serious complaint—Mr. Manning supplies some satisfactory information. The work of repair entailed a cost of £5,105, and the road is now reported to be in good order. We hope it will continue so, and that it will no longer figure among the sorrows of the county surveyor and those of the public who are obliged to use it.

We have hitherto in our notices cited the gist of the reports of the harbour masters of Howth and Dunmore as regards the state of the fisheries of these places, as we deemed the subject was one of interest. Thinking so, we again take note of the matter. Of Dunmore, Mr. E. H. Alcock, the Harbour Master, reports that all through the year 1876 fish generally speaking was scarce, and trawl and line boats failed to make an average season. Occasionally mackerel, whiting, and hake were taken in fair quantities, but no large hauls, either with seines, trawls, or lines. Herring and pilchard almost failed to put in an appearance. The shell fishermen did much better, and of lobsters and crabs there was a good supply. There were from 15 to 22 cutters trawling in the deep throughout the winter, but the whole season was not remunerative. There were some large hauls of the rougher sort of fish—plaice and skate; but better paying fish, including turbot, brit, sole, and dory, was scarce, as was also cod, ling, and eels. To the drawbacks are to be added an exceptionally wild winter, with frequent storms, which, of course, occasioned a great loss to the fishermen. At Waterford and New Ross the salmon fishery proved a good one, the fish being plentiful and of good size. The opening of the salmon season in the present year was not so favourable.

Captain H. D. Burney furnishes his brief report, as usual, on Howth Harbour, and he does not waste many words upon it. He considers the fishery at this port maintained the steady rate of progress of preceding years. Large fleets visit here from Cornwall, Scotland, Isle of Man, and all parts of Ireland. The take of fish was 86,910 mease of herrings, sold at an average of £1 6s. 10d. per mease, making an aggregate of £116,604. He reports the tolls in the 800 boats and 195 cargo vessels amounted to £520, the payment of which in some cases is made with great reluctance. Among the exports, perhaps the only ones, we find 4,000 tons of limestone. Howth, let us remark, has stone enough to rebuild all the cities of Europe, and for ages; almost since the days of Partholan the resources of this historic hill

have been unutilised, at least to any appreciable extent.

The reports of the superintendents and inspectors *re* Inland Navigation, show that the works of maintenance have been attended to in respect of lock-gates, rivers, walls, and towing paths, and the Shannon, Ulster Canal, Lower Boyne, River Maigue, and Tyrone navigation. In connection with the Shannon there is a satisfactory evidence of progress in receipts over expenditure.

Passing on to Appendix C, *re* Landed Property Improvement we find much to interest in the matter of reclamation and drainage, and other works of improvement, which we cannot notice in detail. That, however, which relates to farm buildings and agricultural labourers' dwellings comes fully within our province.

Mr. Thomas S. Irwin, C.E., reports on the counties of Antrim, Londonderry, Armagh, Tyrone, Monaghan, and Fermanagh. On the Earl of Enniskillen's estate in different parts "good substantial labourers' dwellings are being erected." Mr. Robert Gore, of Raveagh, has completed an extensive farmyard and offices; Sir William M'Mahon is completing a farm residence and offices near Mountfield, County Tyrone; Sir Frederick W. Heygate, Bart., is building and repairing labourers' dwellings; Mr. John G. V. Porter, of Belleisle, Co. Fermanagh, is carrying out considerable improvements on his property in the way of drainage and labourers' dwellings and farm buildings. Several other of the noblemen and landed gentry of the counties mentioned are carrying out works of landed improvement. The inspector says he is fully satisfied with the manner in which the proprietors and agents are carrying out their respective works.

Mr. J. Fishbourne reports on the Counties of Carlow, Kildare, Kilkenny, King's, Queen's, Wicklow, and Wexford. Among the loans for the above districts, eleven were for farm buildings, labourers' dwellings, farm dwellings and offices. The inspector is of opinion that the proprietors generally are willing to build and improve farm dwellings and offices, if occupiers will consent to pay a fair percentage on the outlay, and that in most cases tenants are willing to do so. His opinions further on the matter are: "Labourers' dwellings are not looked on as a good investment by proprietors, except when the tenants of adjoining lands agree to pay the instalments on loans as they become due; this, in many cases, will not be done; therefore labourers' dwellings are not built generally, although much needed; and on farms remote from towns or villages it is very often difficult to procure a sufficient number of hands in times when most needed." The price of labour, it is said, has also greatly increased.

Mr. William Bond reports on the County Longford, and parts of Westmeath, Meath, Cavan, Leitrim, and Roscommon. Apart from drainage improvements the loans for the building and repairing of farm residences and offices, &c., continue to be in most favour in the County Longford. Among those instanced are Mr. Gregg's "very substantial farm residence," at Derrydarragh. Messrs. O'Connor and Wade have also provided several "commodious farm residences with suitable offices," on their property in Meath and Cavan; and Mr. Sanderson has made "considerable valuable additions to his farm offices, at great expense." In Westmeath, Lord Longford and Miss Connolly "have



been mindful of the welfare of their labourers, and have provided healthy and comfortable cottages for them—an example which should be widely followed." We echo the desire in the last particular; but why, as we remarked on former occasions, are we not furnished with some definite information of a practical kind? We would like to know the size of the houses, their plan, the materials used, and their cost. The words "commodious," "substantial," "valuable," and other set terms convey very little in the absence of the particulars we have alluded to. We like to see evidence of improvement chronicled; but we would be the better judge of the value of such improvements, if the inspectors in general would furnish in their annual reports somewhat fuller particulars as to the exact construction and character of the farm and labourers' buildings, the erection of which they record so very prettily and vaguely. It is not long since we were called upon to notice some pretty plans of labourers' cottages, which showed a complete absence of ordinary sanitary requirements. The pigsty was provided, but the water-closet was nowhere; and yet the amiable planner of these dwellings, and the landed proprietor for whom they were erected, considered them perfect. Some men expect morality to exist where they cut the ground completely under it, and give to man a housing that they would not provide for the beasts of the field.

Mr. James Jocelyn Poo reports on the County Tipperary. In the matter of loans for farm buildings, he instances some of considerable amount, the principal being those of Mr. Parker, of Castle Lough, and Mr. O'Meara, of Somerset. The loans for labourers' dwellings to Mr. Gibson, of Rocheforrest, Mr. Thomas Butler, of Ballycarron, the Earl of Rosse, and Mr. Barton, averaging nearly £700 each. The inspector says that "there has been only one case connected with water-works—that of Mr. Farrer—which has been attended with very beneficial results, both in a sanitary point of view, as well as a great convenience to every part of a large establishment." Tradesmen's wages are stated to be increasing, and that inquiry proves "that few young men are, as they used to be in former years, bound to artisans or tradesmen."

Mr. Edward Townsend reports on the Counties of Mayo, Roscommon, Galway, and a part of Clare. In relation to farm buildings, he says that "substantial, healthy, and moral cottages for the Irish peasants" remain a serious desideratum, and here we agree with him. Some advance, however, has been made under his inspection, though he states that the high prices of slates has been a great check to every description of building. Mr. Fallon, of Netherville, Mr. Perse, of Moyode, and Mr. Ffrench of Monivea, are reported to have erected "some excellent cottages which seem well adapted to the requirements of the Irish labourer or small tenant." We hope they are, and concerning them Mr. Townsend supplies us this bit of the definite information absent in nearly all the other reports:—"They contain a good-sized kitchen, pantry, or dairy, and three bedrooms, with an independent entrance, good light, and a fireplace in each, and the average cost is £105." We opine that these cottages are intended for the "small tenant" instead of the smaller labourer. Some "fine farm offices" have been erected by Captain Knox, of Creagh,

in the county of Mayo; Mr. O'Rorke, of Clonbern Park, in the County Galway, and Mr. Sandford, of Castlereagh, in the County of Roscommon. An amount of drainage work is also reported.

To the tone and information of the concluding paragraph of Mr. Townsend's report, we take exception. He says:—"Ireland, comparatively speaking, has no manufactures, and is singularly deficient in mineral wealth. Peat exists in great abundance, but it lacks that squeeze essential for the production of that material to which England chiefly owes her wealth and greatness. If this country is ever to become rich, the attention of her people must be directed to the improvement of her husbandry and the reclamation of her land, enabling 'the earth to yield her increase.'" No one could be greater advocates than ourselves for the reclamation of waste land and improved husbandry, and the value of both combined; but we do not hold, neither do those who are thoroughly conversant with the country, that Ireland is deficient in mineral wealth. Quite the reverse; this country is rich in undeveloped mineral resources, and we hope to see her increasing in manufactures. With the developing of the former, the latter will also keep pace, and we would be sorry to see this country always continuing to be an exclusively agricultural one. There is ample room for this country becoming, for years to come, if needs be, more agricultural as well as more manufacturing. Our waste acres count by millions, and in turning them into cultured fields, let us also increase our manufactures by hundreds more.

Mr. William Sidney Cox reports briefly upon the County Limerick and portions of Clare, Tipperary, and Cork. There is little to cite in the matter of building operations, which show a decrease over the previous year. The value of artisans' labour under his view is reported unchanged, and building materials increased in price.

Mr. Henry Stokes reports upon the Counties of Kerry and Cork (a part of). He states that the most important object of the Land Improvement Acts is entirely neglected in Kerry, "until the improvement of labourers' dwellings increases for some years to 25 per cent. on the yearly expenditure, instead of amounting to the accommodation of only six or seven families at £557, as it did for the last year." He is of opinion that we may never expect to see that increase until the extravagance of building is kept down, and houses built at estimates not exceeding £50 a-piece. He tells us next, with some italics, "such houses have been built, and can be built everywhere. Mr. G. Hewson has just shown me a model on his farm at Gortnaskeha, in this county, built by contract, comprising a double house 52 ft. by 17 ft. outside, and 8 ft. high, which is all well lit, and finished inside with plaster ceilings and cement floors, at less than £2 per lineal foot, which will pay. Such examples will be copied, while the building of labourers' dwellings at £160 a-piece only deters prudent people from engaging in what seems to many a waste or unprofitable use of public money."

These £160 cottages mentioned by Mr. Stokes are more likely to be tenant farmers' than ones intended for labourers. If land proprietors can get good cottages erected at £50, they would be fools not to embrace the opportunity. Mr. Stokes does not tell us how many rooms these £50 labourers' dwellings contain, or other needful particulars. He says further that great discrepancy in

cost of farm offices may be found, too. He speaks of a cattle-houso for 42 cows that cost only £2 2s. per lineal foot at £240, and another for 40 cows (root houses annexed in both) which cost about five times as much. Such expenditure as this last, he thinks, can never pay. In his last paragraph we are inclined to agree with him, according to circumstances:—"The use of cement concrete roofing has been tried with success, and I am sure that much of the difficulty of building cheaply for labourers will be got rid of by it, for a concrete roof can be made as cheaply as thatching with straw, strong enough, quite weather-proof, and safe from decay."

Mr. J. T. Cornwall reports briefly upon the County Cork. Among his inspections were twenty-two progress ones, of buildings, ten of which for labourers' dwellings, and the others for farm offices with or without dwellings. None of the latter cases were considerable, but some of the loans for labourers' dwellings were large, and particularly where carried out in towns. He states the demand for the houses is considerable, and that no doubt the advantage to the labouring classes is great.

In conclusion he says that notwithstanding the increase in the prices for building, there is a decided tendency on the part of farmers to get better accommodation both in dwellings and offices. We have now run through all the reports under the head of Landed Property Improvement.

In our next notice we will deal with the report of Mr. T. N. Deane on "National Monuments and Ecclesiastical Ruins."

## THE CAXTON CELEBRATION.

THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

### THIRD PART.

WE would again remind the reader that our sketch in its present form is but a rapid one, and cannot include more than a tithe of names of men and of matters connected with the early rise and progress of printing and publishing in Ireland. From towards the close of the seventeenth century to the end of the eighteenth, mere printers and booksellers of newspapers, pamphlets, tracts, broadsides, ballads, squibs, chap books, almanacks, and a variety of other miscellaneous printed literature grew yearly more numerous, and it would fill a volume to enumerate them, their publications and surroundings. During Swift's time alone in Ireland, the literature that he himself created, and his publications on the other hand gave rise to, is very large in quantity, of the pamphlet, broadside, and ballad kind. The literature in connection with the history and disputes of the Irish Stage, relating to managers, actors, rivals, and others is somewhat extensive, too, and no small portion of it will be found in the current newspapers and other journals of the times.

The most we can do here is to take note of some names and books of interest in illustration of our subject. Castle-street, Skinners'-row (now Christchurch-place), Essex-street, the Blind-quay, Cork-hill, Dame-street, and contiguous streets were throughout the eighteenth century the principal streets of note, and the chief head quarters of the printers and booksellers.

One of the most noticeable printers of the eighteenth century in Dublin was George Faulkner. Indeed the appellation of the "Prince of Dublin Printers," as applied to Faulkner was not an inapt one. His connection with Swift brought him into prominent notice as a printer, but he subsequently became more famous under the combined professions of printer, bookseller, publisher, and journalist, or newspaper pro-



prietor. Mr. Gilbert in his "History of Dublin" brings together many interesting particulars of Faulkener's life and career, of some of which we shall avail ourselves. By birth he was a native of Dublin, born in 1699, and the son of a respectable victualler. The rudiments of his early education were received under Dr. Lloyd, who was accounted one of the most eminent schoolmasters of his time. Faulkener's first acquaintance with the printing trade was in the office of Thomas Hume, a noted printer or publisher in Essex-street, to whom the former was bound apprentice. Hume, as well as his apprentice, afterwards was newspaper owner and printer.

So Faulkener's tastes were imbibed. At the end of his apprenticeship, young Faulkener, in connection with James Hoey, who afterwards as well as his son, became noted in the printing and publishing line, opened a bookselling and printing establishment in Skinners'-row. The partners here commenced in 1724, a newspaper called the *Dublin Journal*. Swift requiring a printer after Harding's death, sent to the publishers of the *Dublin Journal*, and was first waited upon by Hoey, and subsequently by Faulkener. His choice fell upon the latter, and in 1730 the partnership was dissolved between Hoey and Faulkener, the latter removing to Essex-street. From this time forth, Faulkener and Swift's connection and intimacy appear to have been of the closest character. In 1731, Faulkener as the printer and publisher of the *Dublin Journal*, was ordered by the Irish House of Lords to attend at the bar of the house, for having inserted in his paper certain queries reflecting upon the honour of their house. Owing to a prorogation of business, Faulkener was not brought up before October 1733, when he presented a petition, praying to be discharged without fees from the custody of Sir Multon Lambert, Usher of the Black Rod. Faulkener's prayer was acceded to, but not until upon his knees he received a severe reprimand.

There are many anecdotes and stories told of Faulkener, illustrative of his eccentric ways and manners, some true and others doubtless invented by the wits of his time, some of whom took a pleasure in annoying him. In a letter to Alderman Barber in 1735, Swift describes his printer, Faulkener, as the "printer most in vogue, and a great undertaker, perhaps, too great a one." During one of his visits to London, Faulkener met with an accident that necessitated the amputation of a leg, so henceforth his artificial limb served the wits of the city for cracking their jokes for long years. Some classical-minded punsters dubbed Faulkener the "oaken-footed Elziver." In 1735 the printer got again into conflict with the legislature. Having published a pamphlet, written by Dr. Josiah Hort, the bishop of Kilmore, entitled, "A New Proposal for the Better Regulation and Improvement of the Game of Quadrille," which, containing some reflections on the character of Sergeant Bettesworth, the latter worthy represented to the House of Commons as a breach of privilege. Faulkener was committed to Newgate, but in a few days was set again at liberty. In lieu of their fees each of the legal officers accepted, and we suppose contentedly, a new edition of Swift's works. Sir Walter Scott, in his "Life of Swift," honourably observes that "Faulkener was the first who had the honour of giving to the world a collected and uniform edition of this distinguished English Classic." By the last prosecution mentioned, Faulkener obtained considerable notoriety, and his reputation increased daily. His shop became a noted rendezvous for the chief literary and political characters of the day. Urged by his patrons he commenced the publication of the "Ancient Universal History," continuing it with a spirit, and completing it in a satisfactory manner. And here let it be noted that during the publication of this work, he met with a most zealous opposition on the part of his brother booksellers in Dublin, and also the London publishers, who made at the time a determined but unsuccessful attempt to crush the prospering printing trade in

Ireland. The "Universal History" was completed in seven folio volumes by Faulkener in 1744, and was the largest work published in this country up to that time. It is acknowledged that in its typography and illustrations, it will bear honourable comparison with the productions of the contemporary English and continental presses.

During his viceroyalty in 1745-6, Lord Chesterfield formed the acquaintance of Faulkener, and soon a close intimacy grew up, which continued years after his departure from Dublin. It is reported that Faulkener was often closeted with the viceroy at Dublin Castle, and also that he declined the honour of knighthood, much to the chagrin of his wife, who was an Englishwoman, whom he married in London. "Although," writes Mr. Gilbert, "Chesterfield in a vein of grave irony compared Faulkener to Atticus, and in another epistle assured him that his character was clearly defined by the '*pietate gravem ac meritis virum*' of Virgil, he averred that much of his own popularity in Ireland was owing to the advice received from the publisher of the *Dublin Journal*." On his every visit to London the Dublin printer was solicited to call and sojourn for a few days with the whilom viceroy, by whom he was bounteously entertained. His treatment of Faulkener differs much, it may be seen, from that which characterised Chesterfield's treatment of Samuel Johnson. His lordship was vain, and liked popularity, particularly if he could obtain it at a cheap rate through the hands of printers or authors.

In 1752, Chesterfield urged Faulkener to undertake some literary work, to transmit his name to posterity, after the example of Aldi Stephani and other noted printers, pointing out Faulkener's capacities for such a work by his long acquaintance with the printing art, his knowledge of the classical authors, and his intimacy with Swift, Berkeley, and all the best authors of the Irish Augustan age. Chesterfield suggested the publication of a *Typographia Hibernica*, a collection of Anas, and a volume of Swiftiana, into which latter might be introduced some "Faulkeneriana" volumes of biography. Finally, Chesterfield writes in his epistle, suggesting volumes of history:—"What is history but a collection of facts and dates, and what is your journal but history? Our friend the Chief Baron (Bowes), with whom I have often talked upon this subject, has always agreed with me, that, in the fitness of things, it was necessary you should be an author; and I am very sure that if you consult him, he will join with me in exhorting you to set about it forthwith. Whenever you assume that character, I," adds Chesterfield, "claim a very strong dedication with the first copy of the work, as an old friend, which, joking apart, I sincerely am."

Faulkener could hardly do less, after such an encouragement (whether Chesterfield was thoroughly sincere or not), than attempt some work worthy of his name. He projected a "Vitruvius Hibernicus," to comprise "the plans, elevations, and sections of the most regular and elegant buildings, both public and private, in the kingdom of Ireland, with a variety of new designs, in large folio plates, engraved on copper by the best hands, and drawn either from the buildings themselves or the original designs of the architect, in the same size and manner of Vitruvius Britannicus." It was announced that this work was to be printed on Irish paper, with descriptions of the buildings in Latin, French, and English; the plates were to be wholly executed by Irish artists, the prospectus adding, "We have as good engravers in Dublin at this time as any in Paris or London."

It is indeed a matter of much regret that Faulkener's projected work was not executed, for it would have supplied a want and a great blank, as Mr. Gilbert truly observes, in our local history. In 1753, when the work was projected, many buildings existed over the country whose architectural features were worth preserving, and materials and subjects were not wanting in Dublin and its neigh-

bourhood. Facilities, too, existed for turning out a creditable work, as good, if not better, than Campbell's "Vitruvius Britannicus." The want that we have alluded to was partially supplied later in the century by the publication of "Pool and Cash's Views of Dublin" and "Malton's Views"; but such a work as Faulkener projected would have been most timely, though it could not include some of the public buildings illustrated in the latter works, as they had not been erected till several years after the date of Faulkener's prospectus.

In Faulkener the Catholics of this country found a friend, as he was a zealous advocate for some years for the relaxation of the Penal Code. Mathew O'Connor wrote that "Faulkener's name deserved to be handed down to posterity as the first Protestant who stretched his hand to the prostrate Catholic, recognised him as a fellow Christian and a brother, and endeavoured to raise him to the rank of a subject and a freeman."

It is not necessary here to enter into all the scenes and literary controversies in which Faulkener's name figured—his conflict with Samuel Foote, the actor, in Dublin, who made him a subject of ridicule upon the stage. Howard, a Dublin attorney of some note, who was a bit of a poetaster and playwright, figured prominently in his sarcastic assaults upon the printer, but he was often paid back in his own coin by Faulkener's friends and his own. Chesterfield dissuaded Faulkener from printing a projected edition of Swift's works, in quarto, in a magnificent style; but in 1772 the printer brought out the Dean's works, in twenty volumes, octavo. The notes to this volume are said to be chiefly written by Faulkener himself, and their style subjected him to some sharp criticism and ridicule. Sir Walter Scott, however, has made ample use of them in his "Life of Swift," and other authors have done the same.

There is one blot pointed out in connection with our Dublin printer's career—his publication of Lord Orrery's strictures on Swift. One would suppose that Faulkener would have been the last man to publish Orrery's calumnies; but the dean was dead, and the nobleman who had formerly exhibited sycophancy to the object of his attack, found congenial occupation in attacking a dead lion. Faulkener erred grievously in permitting his press to be used, and he received a severe literary castigation for his offence. After all, the printer's errors, personal and mechanical, were soon forgotten in the light of his generous character in many ways. He was famed for his hospitality and good fellowship, and among his guests were mostly found men of first rank as well as those of the greatest literary talents in Ireland. Faulkener is described by one authority as a man "something under the middle size, but when sitting looking tolerably lusty, his body being rather large; his features were manly, his countenance pleasing, though grave; and his whole aspect not destitute of dignity; his limbs were well formed, and in his youth he was strong and active."

Faulkener died on the 30th August, 1775, of a distemper caught in dining with some friends in a tavern in the suburbs. He left no children, and was succeeded in his business by his nephew Thomas Todd, who assumed his uncle's surname, and as Thomas Todd Faulkener was known till his death in 1793. The nephew obtained the appointment of city printer, and, as such, figures in our old Dublin directories. The bust executed for George Faulkener, which he intended placing in a niche in the front of his house, Essex-street, corner of Parliament-street, was presented by his nephew to St. Patrick's Cathedral, to be placed over Swift's monument, where it may still be seen. It was executed by Patrick Cunningham, a Dublin sculptor, and brother to John Cunningham, the poet and actor. Faulkener's reputation was made by Swift, and, despite his small faults, the "Prince of Dublin Printers" of the eighteenth century will long live in the literary and printing and publishing annals of his country.



Of other printers, publishers, and booksellers—names connected for long years in the eighteenth century with their profession in Dublin—are the Ewings, the Exshaws, and the Hoeyes. It is a matter of some regret that we cannot furnish so many interesting particulars in connection with their career, and that of some more noted names, as what we could wish. As early as 1724, the name of George Ewing occurs amongst the booksellers and publishers of Dame-street, at the "Angel and Bible." Earlier than this in 1704, we find in the same street one "Jacques Fabrij, marchand libraire Français," a French Huguenot settler possibly, for throughout the eighteenth and a portion of the present century, we had some noted literary men and bibliopoles in Dublin in the publishing and printing trade of Huguenot descent. George Ewing was a large importer of British and foreign books. Later in the century, if our references are right, the father and son had establishments at different dates in Essex, Exchange, and Parliament streets. In George Semple, the architect's, "Building in Water," containing his Diary of the Rebuilding of Essex Bridge, the elder Ewings name occurs in a manner that will not be uninteresting to quote here. Semple had been in much anxiety about the commencement of his work, and the plan he should adopt. He had paid a visit to London, consulted Labeyle, the architect of Westminster Bridge, went to Dover and to Ramsgate, where some harbour works were then constructing, bought some plant on his way home through Liverpool, and collected some other odds and ends which he thought might be useful to him in his work. This was in the year of 1752. "On my return to Dublin," writes Semple, "I immediately set about to sum up and reconsider the very little I had acquired concerning coffer-dams, the result of which was, that after all, I found myself in the same predicament as before. Not one man had I seen or heard of, that seemed to be in the least acquainted with the subject; nor one book that contained even that word, or conveyed the least idea of the construction of it, except what I before mentioned, but fortunately for me, I went to enquire for some books at Mr. George Ewing's, and telling him of the dubious situation I was in, he informed me that his son Alexander was then on his travels and he believed by that time in Paris. I earnestly requested he would write to him directly in the most pressing manner, to procure me at any expense all the books, drafts, or plans that could afford me any kind of instructions for laying the foundations of a bridge about 25 ft. under high water, in a rapid river, and to send them with all expedition. He most zealously performed his part, and it happened at that juncture Colonel Belidor had completed his fourth volume of Hydraulic Architecture, which was sent me, together with the other three volumes; and also a perspective view of the men at work in a coffer-dam at the bridge at that time re-building at Orleans. The language I was a stranger to, but on turning over the plates I quickly perceived his construction of coffer-dams, as we call our inclosure. My drooping spirits then instantly revived, and I immediately went on with my work with vigour, and entertained the most sanguine hopes of success." Yes, and realised them. To what accidents and incidents do not some men owe their courage and success! Here it was George Ewing's bookshop and his son Alexander on his travels.

Both of the Ewings, from the early part of the eighteenth till some years into the last quarter of it, continued as creditable representatives of the bookselling and publishing trade, and a number of editions of various works were issued by both. We may, in passing, just allude to a few. The elder Ewing published an edition of Johnson's Dictionary, two volumes, quarto, which was considered at the time to have eclipsed the London one. Later in 1771 he brought out Shakespeare in 12 vols., and also an edition

of Parnell's Poems, illustrated. In 1772 Thomas Ewing published O'Halloran's History and Antiquities of Ireland, in two volumes, quarto. This work, considering the time, was creditably turned out. We find throughout the last century, and early in the present, publishers engaged in rivalling with each other in bringing out editions of a popular work; hence we have several London and Dublin editions of the one work brought out by different publishers, some pirated and others new.

Thomas Hume, already alluded to, who had his printing establishment on Cork-hill in 1716, and later in Essex-street, was succeeded at the former place by the Exshaws, a family who were connected with the printing, publishing, and bookselling trade of Dublin, for upwards of a century, first at Cork-hill, next in Dame-street, and finally in Grafton-street. The Exshaws, like other publishers at the time, brought out some piratical editions of English authors and magazines; among them were the History of Sir Charles Grandison, and the old *London Magazine* of the last century. Faulkener, too, in 1735, reprinted the above magazine under the title of the *London and Dublin Magazine*, or the *Gent's Monthly Intelligencer*. In Exshaw's *Gentleman's and London Magazine* for June, 1774, Dr. Patrick Browne, an Irish medical and literary man of some note in the last century, and author of the "History of Jamaica," where he resided for many years, published "A Catalogue of the Birds of Ireland;" and in the issue of the same magazine for August following, "A Catalogue of Fishes found upon our Coasts, and in our Lakes and Rivers, Classed and Disposed according to Linnæus." Dr. Browne was a native of Woodstock, Co. Mayo, where he was born about the year 1720; he died in 1790. We read of Browne's "Civil and Natural History of Jamaica," which was published in 1756, in folio, ornamented with forty-nine engravings of natural history, a whole sheet map of the island, and another of the harbour of Port Royal, Kingston, &c., that "of this work there were but two hundred and fifty copies printed by subscription, at the very low price of one guinea, but a few were sold at two pounds two shillings, in sheets, by the printer." Most unfortunately all the copper plates as well as the original drawings were consumed by the great fire in Cornhill, in November, 1765. The author of a sketch of the life of Dr. Browne, in the *Anthologia Hibernica*, says that Dr. Browne was at six different times in the West Indies, and lived for above twelve months on the island of Antigua. It appears that the doctor also sent to Sir Joseph Banks, of the Royal Society, "A Catalogue of the plants growing on the Sugar Islands, described according to the Linnæan system," in quarto, containing about eighty pages, which Sir Joseph promised to get published. Browne was a frequent correspondent with Linnæus, and among other MSS. left behind him at his death was "Fasciculus Plantarum Hibernicæ," or a catalogue of such plants as have been observed by the author, chiefly those of the counties of Mayo and Galway, to which is added such as have been mentioned by other authors worthy of credit, the produce of any other parts of the kingdom." This work contained 110 pages, 8vo, written in Latin, with English and Irish names. In the preface of his work on Jamaica, Browne thus refers to his eminent brother Irishman, physician, and naturalist, Sir Hans Sloane, whose munificent collections served as the foundation of the British Museum. "Sir Hans Sloane had not collected above 800 species of plants in all his travels. In Jamaica alone I have examined and described about 1200, besides fossils, insects, and other productions, of many of which he makes no mention. It must be owned, nevertheless, to his praise, that his works, inaccurate as they are, upon the whole have done both the author and his country credit." Sir Hans Sloane, it may be mentioned here, had himself as early as 1707 published the first volume of the "Natural History of Jamaica,"

the second volume of which did not appear until 1727. Our digression, perhaps, will be excused as Dr. Browne's name incidentally cropping up in connection with the Exshaws suggested what we have written. Of the last and most prominent member of the Exshaw family, living from the last into nearly the third decade of the present century, we will give some particulars as we proceed.

### THE NORTHERN SUBURBS.

AN OLD MAP, WITH ANNOTATIONS.

A CONTRIBUTOR of an article to *Saunders's News-Letter* on the 25th ult., treating of the "Extension of Dublin Northwards," and giving memories and associations of that district, has made some assertions which are not warranted, or perhaps it is more kind to say has committed a few mistakes.

In referring to the IRISH BUILDER, he writes:—"From a map and notes contributed some years ago to the IRISH BUILDER by Dr. Willis, of Fortescue-terrace, Rathmines, it appears," &c. The article which the contributor in *Saunders* acknowledges containing information availed of, and to which he is welcome, was not contributed to the IRISH BUILDER by Dr. Willis, but by his son-in-law, Mr. William Hughes, one of the oldest contributors to this journal. The map alluded to was in the possession of Dr. Willis, who kindly permitted its use to our contributor, and on this map, together with information furnished at the same time by Dr. Willis, was based what was written in the IRISH BUILDER. Apart from this, our contributor was well qualified for his task, for he has a long acquaintance with the subject treated, and a no small knowledge of the history of Dublin and its environs north and south. It is sufficient, then, for us to say that Dr. Willis, whose courtesy, however, during his long life has often been evidenced towards literary men, was not the writer of the article mentioned, and indeed we are sure he would be the last to take credit for it. The article in question is entitled "Memories of the Past," and appeared in the IRISH BUILDER of September 15th, 1872.

The writer in *Saunders* falls also into error about the original building on the ground of All Hallows College, Drumcondra—"a square block erected by the Earl of Charlemont in the last century." The square block, instead of being erected by the Earl of Charlemont, was the private mansion of the Earl of Charleville, and was erected by the latter instead of the former. This mansion, we might add, had subsequently amongst its residents the noteworthy Sir John C. Beresford and Sir Guy Campbell—the latter its last occupant before the house and grounds passed into the possession of the founders of All Hallows College, about 1842-3.

As we do not wish to be hypercritical, we will pass over some other matters not very definitely described by the contributor to *Saunders*, and the sources of which are not acknowledged.

Pendant to the above we may say, in reply to a correspondent who writes to us in reference to the map, that we believe it has passed out of the hands of Dr. Willis along with other rare documents and books, during the recent sale of that gentleman's valuable library.

The West-end branch of the Bank of England in Burlington Gardens has been cleansed outwardly by one of Messrs. Merryweather and Sons' steam fire-engines. The operation took one working day, as contrasted by several weeks' labour if done by hand.



LECTURES ON ARCHITECTURE.\*

(Continued from page 208.)

FIFTEENTH CENTURY.—OLD LONDON.

WITH these general ideas of the usual arrangement of Mediæval cities, let us now direct our attention to London, and consider, as far as our imperfect information enables us to do so, what was its appearance previously to the Great Fire of A.D. 1666, which robbed it of so much of its historical interest.

We do not know when London was first founded, but there is little doubt that even when the Romans left Britain it was a place of importance, and it was called *Lundinium* by Tacitus and others. This name has been considered by some antiquaries to have arisen from a mixture of Roman and Celtic titles. A Temple of Diana is believed to have stood on the site of St. Paul's, and *Luna* was one of the names of the goddess. The termination of the name has been traced to "*don*," or "*din*," which, in Celtic, means a wood or hill, or fortified town. Although these conclusions are, however, at best doubtful, it is certain that London became, in early times, a place of great importance, and increased rapidly in wealth and population.

The position of London on the Thames marked it out as a natural centre of commerce; and the situation, with reference to the Continent, was convenient, in days when our kings had important possessions abroad. London was a walled town, and the walls were first built in Roman times, as is proved by the remains which still exist, and are brought to light from time to time, as clearances and demolitions are effected. The course of the walls may be roughly traced by the names of the gates. Thus, if we start on a tour round the City, from the Tower, then as now a fortress, we come to Aldgate, thence to Bishopsgate, Cripplegate, Aldersgate, Newgate, Ludgate, and so to the Thames, where there was another fort. This fort was probably connected with the Tower by another riverside wall, built parallel with the Thames, and stretching east and west. The names of Dowgate and Belins-gate, or Bilings-gate, indicate the course of this wall.

Besides the walls, the Romans must have executed other important works in London, as is proved by the interesting tessellated pavements, and other remains, which are still from time to time discovered. In the stormy times which followed the decline of Roman power, London experienced many vicissitudes, and suffered much violence, under Danes, Saxons, and Normans.

Gradually emerging from such misfortunes, we find it acquiring stability, as early as the twelfth century, for in the reign of Henry II., it is thus described by Fitz Stephen, a monk in the house of Thomas à Becket. He says that "amongst the noble and famous cities of the world, this of London, the capital of the Kingdom of England, is one of the most renowned, on account of its wealth, its extensive trade and commerce, its grandeur, and magnificence. It is happy in the wholesomeness of its climate, in the profession of the Christian religion, the strength of its fortresses, the nature of its situation, the honour of its citizens, the chastity of its matrons, and even in the sports and pastimes there used, and the number of illustrious persons that inhabit it." After referring to the royal palaces, he tells us of the gardens of the citizens, well furnished with trees. On the north, he says, are "cornfields, pastures, and delightful meadows, intermingled with pleasant streams, in which stands many a mill, whose clack is so grateful to the ear. Beyond, an immense forest extends itself. . . . This city," he adds, "is on the whole most charming, at least when it has the happiness of being well governed." He goes on to speak of a famous cook-shop on the river, where fish of all kinds could be had, besides other dainty viands, and describes Smithfield as a horse exchange and market.

He then speaks of the pleasure resorts of the citizens, for horse-racing, archery, tilting, mystery plays, bear hunting, and the like, with skating and sliding on the ice.

The worthy monk had not left all his human sympathies behind him on entering the cloister, and he presents us with a view of old London in the twelfth century, possessing many of the advantages and elements of natural wealth, by which succeeding ages have abundantly profited. His account is the more interesting, because we have no thoroughly trustworthy maps or views of an early date, or indeed until the sixteenth century. I am fortunate, however, in being able to place before you an interesting series of engravings of maps and views of old London from the valuable collection of Mr. Grace, to whom my best thanks are due for his kindness.

After the sixteenth century, such representations abounded, and from them we may form a tolerably clear idea of the appearance of London under the Tudor and Stuart sovereigns. The peculiarities of its position, and the antiquity of its foundation, account, doubtless, for the irregularity of the lines of the great thoroughfares, and you will readily trace these in our existing streets of Bishopsgate and Aldersgate, from north to south; and Holborn and the Strand, from east to west.

London is not all changed. The churches of St. Paul and Westminster Abbey are still the great landmarks; London Bridge is still pre-eminent in traffic; the tower is still the fort of London; and Westminster remains a Palace, although occupied by the Legislature instead of by the Sovereign. In the arrangements of modern London, we are still controlled by ancient customs, and the lines of the great thoroughfares are, to a great extent, the same as in olden days.

Thus it happens that although Mediæval London was almost wholly destroyed by the Great Fire, an amount of historical interest clings to it, more than to many other cities; and certainly to a far greater extent than would have been the case had the grand schemes of Sir Christopher Wren for a new London been carried into effect. This remark applies, of course, chiefly to the older and central parts of the City, which were built upon and settled when St. Giles's was a village "in the Fields," and Lincoln's-inn was almost in the country.

The great monasteries of Grey Friars, Black Friars, and Carthusians had been dissolved; the former had become Christ's Hospital, and the latter the Charterhouse, founded by Sir Thomas Sutton, whose good deed was thus commemorated by a Poor Scholar:—

"Blessed be the memory  
Of good old Thomas Sutton,  
Who gave us lodging, learning,  
And who gave us beef and mutton."

Such foundations speak well for the public spirit of the age, as well as for the strong religious feeling which is evidenced by Sir Thomas Sutton's own prayer,—"*Lord, Thou hast given me a large and liberal estate, give me also an heart to make use thereof.*"

The great commercial street of old London was Chepe, now Cheapside,—Chepe being a market by Saxon derivation. The houses here were of the type I have before described, as characteristic of the time, with gables towards the street. I may call your attention to various examples of old houses in the engravings before you, such as the ancient timber houses in the Strand, some houses in Chancery-lane, Sir Paul Pindar's house, and others shown in the general views.

Most of the houses included shops, which were commonly external structures with lean-to roofs against the front walls. "*Chepe*" was the great centre of business, with the best shops of goldsmiths, mercers, and others. One of the famous Elcanor crosses was erected in it opposite to Wood-street, and two conduits supplied water for drinking and for domestic use. The eastern, or great conduit, was near to the Poultry, which was used as a market; and the small conduit stood at the

western end, towards St. Paul's. The corn-market was held in Cornhill. The Standard was placed close to Bow Church. It had four spouts of water running different ways.

The Exchange was at the eastern extremity of "*Chepe*," as it is now, and at the west end was St. Paul's, with numerous ecclesiastical buildings clustered around it, and the famous Paul's Cross, from the pulpit of which Church dignitaries preached many varying doctrines, as the teaching of the Papal or the Reformed Churches came by turns into prominence and power. As assemblages here seemed likely to trouble the public peace in the post-Reformation days, when theological strife was only too apt to give rise to violence, the cross was pulled down by order of Parliament, in 1643. It was then a covered and partly enclosed pulpit, with a staircase leading to it, and a domical roof surmounted by a cross. In early times, penances were performed here, as in the case of Jane Shore.

Old St. Paul's was entirely destroyed by the fire, not before the western end had been modernised by Inigo Jones, who built here his famous Corinthian portico, looking down on Ludgate. The old church must have been magnificent, with a length of 700 ft., and the central spire upwards of 500 ft. in height.

The spire had fallen before 1666, but I have placed before you some views of St. Paul's, both as it existed at the time of its destruction, and also as it has been supposed to have appeared in all its original Mediæval glory.

There seems to have existed, from the earliest times, some sort of rendezvous for merchants and traders, where the Royal Exchange now stands. At first, these personages only met at street corners, or under the arcades, which were not uncommon in Mediæval towns, and it was not until the sixteenth century that Sir Thomas Gresham erected a regular guild for the London merchants, thus giving another example of the public spirit of which I have before spoken. The work erected by Sir Thomas Gresham consisted of an open central area, with arcades around, and rooms over the same, with shops at the sides, and this was the arrangement adopted in most buildings of a similar nature abroad.

There is a description of the Exchange on an old print, which thus proceeds, "*The Royal Exchange was erected in 1566, at the sole charge of Sir Thomas Gresham, knight, and was burnt down 100 years after, in 1666. After the fire it was rebuilt, most part with stone, with such curious architecture that it surpasses all other changes or burses. The whole fabric cost about £5,000, one half paid by the Chamber of London, and the other by the Company of Mercers. There are 160 shops above, let at £20 rent each, and £30 fine, and several shops below, on every side, and large vaults underneath, which yield considerable rents. The ground whereon it is built, being but 171 ft. from north to south, and 203 ft. from east to west, is very little more than three-quarters of an acre, and, when all let, produces £4,000 yearly rent.*" [What is that three-quarters of an acre worth now? and what rent would it produce?]

The building was styled the "*Byrsa Londinensis*, vulgo, Royal Exchange of London." It followed the main lines of Sir Thomas Gresham's work, and had an entrance under a central tower, with side arcade.

Proceeding eastward from the Exchange, and crossing the busy throng of persons proceeding southwards to London Bridge, we come to the Tower, with surrounding walls and moats. The Tower is a good illustration of what has been previously said, as to the gradual changes of an Englishman's house from a castle to a dwelling. At once "*a fortress, a palace, and a prison*," it has played an important part in most of the crises of English history, and many a proud noble has entered the Tower by Traitor's Gate, only to leave it for the scaffold on Tower-hill. It is, perhaps, the most interesting relic of Old London, and has been preserved, and partially restored, in recent times, with judgment and skill. The tower was evidently a

\* By Professor Barry. Fifth lecture. Delivered at the Royal Academy on Monday, March 12th.



place of great strength, before the use and improvement of artillery, and occupied almost the position of a *tête du pont* with reference to London Bridge, the only bridge of Old London.

Old London Bridge had an importance from this circumstance, beyond that of its modern successor. It was lined with shops, after the custom of the time,—a custom which is still exemplified, as some of you are aware, at the *Pento Vecchie* at Florence. In London, the bridge was defended on the Southwark side by a turreted gateway, the upper part of which displayed the heads of those who had died by public execution,—a ghastly introduction to the City, which was transferred to *Temple Bar* in the reign of Charles II. The houses on the bridge had been much altered and disfigured before their final demolition; but some of the older engravings show that the earlier structures were not devoid of architectural pretensions. They were not at first arranged like a street, as at the *Rialto* at Venice, but were gathered together, so as to form square masses, entirely isolated, with inner quadrangles, and a passage through the centre of the latter. The quadrangles were lined with shops.

At the City end of the bridge, the first London Waterworks were constructed with wheels and pumps in 1582. Until this primitive machinery was erected, conduits, and public pumps, and cisterns were the only sources of supply available by the citizens. The narrowness of the arches of the bridge, and the obstructions of its heavy piers increased the current in the tideway to such an extent that to “sheet the bridge” was a recognised peril, so that numerous accidents happened, and many suicides were there committed. There was a chapel near the centre of the bridge, of which I am able to show you an illustration. It projected eastwards, and was dedicated to St. Thomas. The remains of it were uncovered when the present London Bridge was built, and a very beautiful series of drawings were made of both Old and New London Bridge by my distinguished friend, Mr. E. W. Cooke, R.A. There was a destructive fire on Old London Bridge in 1758.

New London Bridge was commenced in 1824, and was opened to the public in 1831 by King William IV. and Queen Adelaide. It is already so far antiquated that it is pronounced insufficient for the traffic, and various schemes have been suggested in order to increase the width of the roadway. As it stands, it is a fine specimen of engineering art, erected at a time before engineers came to think that they might disfigure our towns to any extent, provided their ugly roofs and mis-shapen girders stand, and their shareholders make profits. Bridge building in early days was regarded as a work of piety, and was carried on by confraternities, called *Brethren of the Bridge*. Hence the frequency of chapels on bridges, of which many records exist.

From London Bridge to Westminster the river, as yet little polluted, was lined with important buildings, the residences of the nobility. Here were Winchester House, the palace of the Bishop of that see, with St. Saviour's Church, all on the Surrey side. Hard by, were the Globe Theatre and the gardens for bull and bear baiting.

Immediately opposite stood Fishmongers' Hall, and after passing Dowgate and other warfs, and the sanctuary at Whitefriars, we came upon the Temple Gardens and buildings standing on the verge of the district saved from the Great Fire. The Templars' magnificent church, so well known to most of us, is one of our finest reminiscences of Old London.

After the Temple the present names of the streets serve to recall to us the history of the past. Thus, where Essex-street now is stood the palace of the famous Earl of Essex, the favourite and victim of Queen Elizabeth. Arundel House was near, and old Somerset House, built for the Protector Somerset by John of Padua. Closely adjoining was the Savoy Palace, of which the Chapel still

exists, and maintains the rank of a royal chapel.

We then find Worcester House, where Beaufort-buildings now are; and Salisbury House, on the site of the present Cecil-street; Durham House, the residence of the Bishop of that see; and York House, belonging to the Archbishop, next follow. You may mark the site of the latter by the water-gate of Inigo Jones, which now stands, deserted and forlorn, on dry land, cut off from the river by the embankment.

Northumberland House, with a fine garden, was the last great house before reaching Whitehall and Westminster. It was on the site of an ancient abbey. Every trace of it has now, as you are aware, been removed, and the old position can only be recalled approximately, for the future, by the name of Northumberland Avenue, given by the Metropolitan Board of Works, to their new street connecting Charing Cross with the Embankment. It is impossible to regard the sweeping away of old landmarks without regret, but in the case of Northumberland House the old buildings had long since been destroyed, and there was nothing in their comparatively modern successor of sufficient artistic value to prevail against the urgent necessity for improving the main communications of London.

Where the statue of King Charles is now placed, the cross of Charing once stood. It is supposed to have been octagonal on plan, with eight statues in niches. No precise drawings of it exist, but the restoration of the cross in front of the South-Eastern Railway Station was based, as far as possible, on the scanty data of archaeologists. Another Eleanor Cross was situated in Cheapside, but it seems to have been destroyed or removed. It was succeeded by Cheapside Cross, which was pulled down, in Puritan days, under an order of Parliament, by Robert Harlow, with a troop of horse and two companies of foot soldiers. We may judge from the force employed that the work was not popular with the citizens, although it is recorded that “at the fall of the top cross, drums beat, trumpets blew, and multitudes of caps were thrown in the air, and a great shout of people with joy.”

Returning from Cheapside to the river, I must not omit to notice Baynard's Castle, which stood close to the great monastery and church of Black Friars, and between the latter and Queenhithe. Baynard's Castle was a relic of Norman architecture,—a rectangular mass with flanking turrets. It had royal reminiscences, and Richard III. was crowned there. The English kings were well supplied with palaces, for without reckoning the Tower and Baynard's Castle we find the Savoy, Whitehall, and Westminster, within a short distance of each other. Near to the Savoy was the palace of Lord Burleigh, afterwards called Exeter House, and ultimately converted into a bazaar and menagerie, under the name of Exeter Change.

Whitehall was not originally a royal palace. Under the title of York House it had long been the London residence of the archbishops of the Northern province, and so remained until the fall of Cardinal Wolsey, when it was seized by his royal master. The name was then changed to White Hall, a title supposed to have been suggested by the whiteness of some stone buildings then in progress. It was intended to connect Whitehall with Westminster, and to give to the whole range of buildings the title of the “King's Palace at Westminster.”

Westminster had been a royal residence from Norman, and even Saxon times, and the walls of Westminster Hall are full, as I mentioned before, of remains of Norman arcades, which have been since filled up.

At right angles to the hall was St. Stephen's Chapel, one of the most beautiful structures of the thirteenth and fourteenth centuries. It was the Chapel Royal of the palace, and was well worthy of its name. Unfortunately it is now lost to us, having been destroyed by the fire which consumed the old Houses of

Parliament in 1834. It had large four-light windows of beautiful tracery, divided internally by niches, and there was a wooden roof. The crypt below the chapel not having been wholly destroyed, has been restored. It is unusually lofty for a crypt, and had been used originally for a chapel. When it was decided to rebuild the Palace of Westminster, there was an intention to restore this building to its original use as the chapel of the palace. Unfortunately this idea has never been carried into effect, and Westminster is without the Chapel Royal, which has always been considered a necessary adjunct to a royal palace.

The precincts of Westminster were entered from Whitehall by an archway, the design of which has always been attributed to Holbein. It was a curious structure, as you will perceive from the view before you, with turrets flanking a centre gateway, the whole being covered with colour in the form of tiles and earthenware, after a fashion which has in some degree come again into favour in our own times. We have, unfortunately, no remains existing of the old place at Westminster, as the fire swept away all traces of it. Fortunately the Abbey is still our inheritance, and presents much the same appearance as of old, if we deduct the towers of Sir C. Wren, and add a heterogeneous assemblage of sculpture, much of it indifferent, and nearly all of it unsuitable to a great Mediæval church.

In New Palace-yard, the wool-market was held. There was here a conduit, from which ran wine on great occasions, such as coronations. Near the angle of the yard stood the clock-tower, not far from its present graceful successor. The clock possessed a great bell, which we will hope was not cracked, as is the case with unfortunate Big Ben.

The buildings I have mentioned, being all of importance, were, for the most part, solidly constructed; but we must not forget that the ordinary houses of the citizens are still built of wood; while wooden projections, such as pent-roofs and balconies, abounded. Stories projected one beyond another, until in narrow streets they almost touched. Picturesque they might be; but, alas, how dangerous! and how sadly was their danger proved! Close contact led easily to infection, the danger of which was aggravated by the absence of fresh air and ventilation.

The Great Plague in 1665, plunged the city into mourning. It is scarcely an exaggeration to say, in Scripture language, “There was not a house where there was not one dead,” for it has been reckoned that one in four of the population was carried off by the disease, and 70,000 persons died.

Hardly had the plague ceased, when the Great Fire swept away almost the whole of Mediæval London. So extensive a destruction could hardly have been possible, except under the conditions of domestic architecture which I have attempted to describe to you.

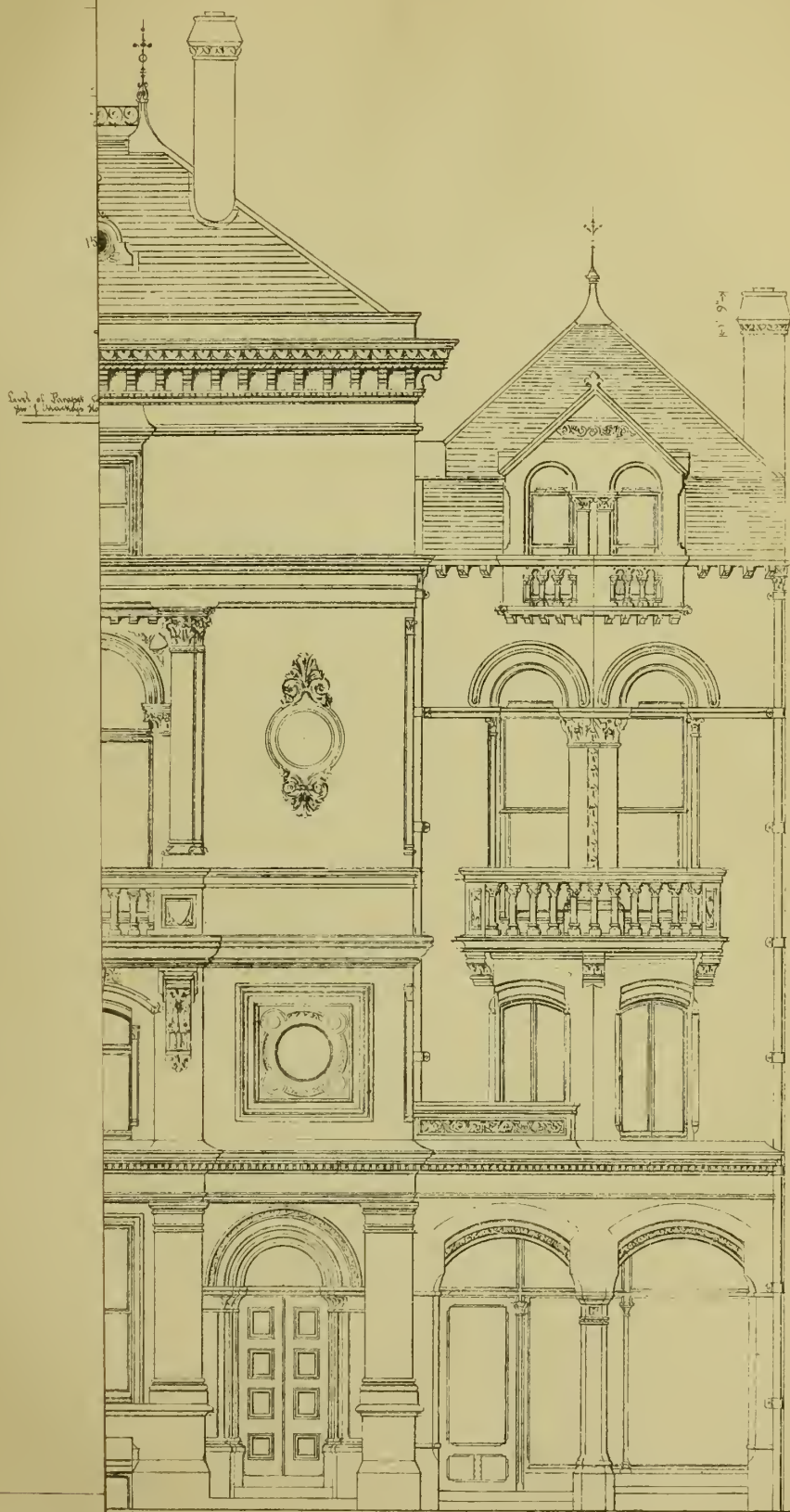
Evelyn records in his diary that it commenced at ten o'clock at night, on the 2nd of September, 1666, and continued for three days. Speaking of the helplessness of the people, he says,—“The conflagration was so universal, and the people so astonished, that from the beginning, I know not by what despondency or fate, they hardly stirred to quench it, so that there was nothing heard or seen but crying out and lamentation, running about like distracted creatures.”

The Thames was covered with boats, conveying to places of safety families and such of their goods as they could hastily save. The flames became so widely spread that none could approach for the heat, and the glare was seen for fifty miles. Evelyn returned to his country house, having, as he thought, seen the last of London. He writes in his diary,—“I returned with a sad heart to my house, blessing and adoring the mercy of God to me and mine, who, in the midst of all this ruin, were like Lot in my little Zoar, safe and sound.”

Well might he suppose that the calamity was irretrievable. Five-sixths of the City lay in ashes, and the flames had extended over a space of a mile and a half in length,



STREET DUBLIN.

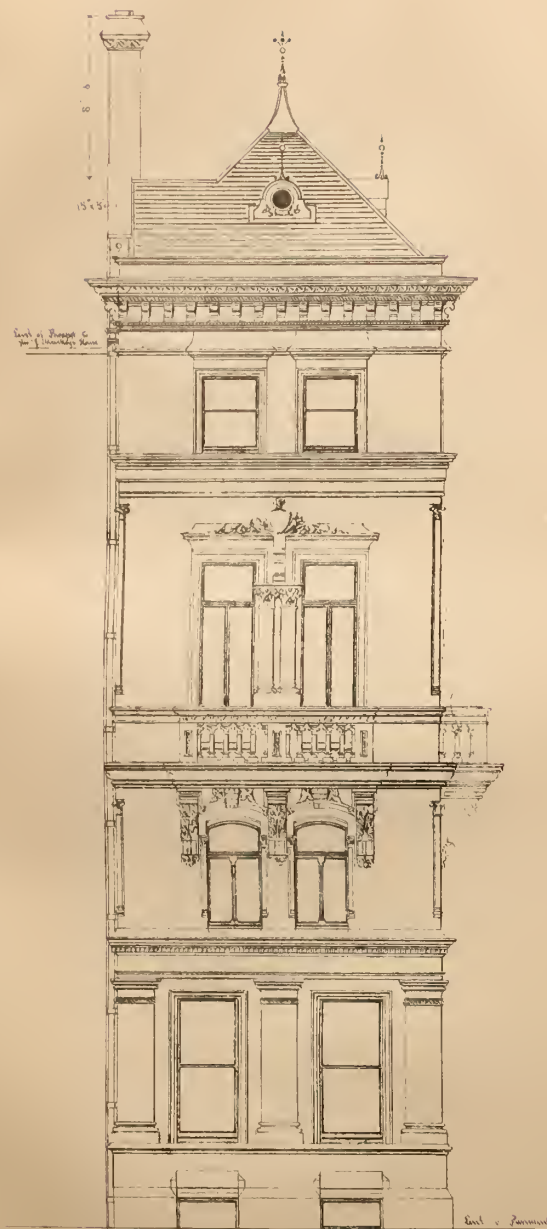


Engraving by J. H. H.

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# SCOTTISH WIDOWS INSURANCE BUILDINGS WESTMORELAND STREET DUBLIN



View towards Westmoreland Street

View towards College Street

Scale 1" = 10' 0"

Scale 1" = 10' 0"



and half a mile in breadth. As Evelyn wrote,—“London was, but is no more.”

This was in 1666; what would he have said if he could have been told that 200 years afterwards London could be described, in the language of a recent writer in one of our periodical reviews, as covering an area of 78,000 acres, with a jurisdiction over 576 square miles, with four millions of inhabitants, increasing at the rate of 75,000 a year?

Such is London now.

## A HISTORY OF BELFAST.\*

“BELFAST as a town has no ancient history.” Such is the initial paragraph of a portly and interesting volume which has recently issued from the local press, and has for its theme the history of the capital of Ulster—a town which, rejoicing in modern times in an advanced commercial prosperity, claims under various titles a notoriety all its own. Sometimes its townsmen (not yet citizens) fondly call it “Linenopolis,” reminding us thereby of its staple manufacture. Ofttimes we read of it as the “Northern Athens”—a title which, by the way, it assumes in emulation of Edinburgh, or of the kindred *nom-de-plume* “The Athens of Ireland,” whereby the citizen of Cork, on more than the *ipse dixit* of Brewer’s Dictionary, vaunts the “Beautiful City.”

We have been anticipating, from local announcement, this History of Belfast, and confess that it was with feelings of curiosity we approached it—not having any recent acquaintance with its author, but fearing, on the one score, lest it should be smitten with the ecstacy of epitaph writers, and on the other a historical collation such as that anent the County Down, recently given us by another and very different hand. But we must admit, on very close examination, that this is throughout a carefully-selected compilation, in which the fruits of a most extensive and discriminating research are presented in connection with a dispassionate calm review, without *couleur de rose*.

We are not disappointed in looking over this most sensible and well-penned monograph; and though, as the author informs us almost in apology, Belfast is “unfortunately wanting in all the great essentials with which towns and cities, either ancient or so large, often abound,” yet in the first chapter, without any calls upon his imagination he rivets our attention, and gives us graphically all that can be gleaned of the earliest history of the “Fearsat” or Ford (Bel-feirste) from which the early town took its rise as well as its name.

In allusion to the want of the “great essentials,” the author ruefully deplores that “we have no musty charters or archives, no rare church history, no patron saint to reverence, no old buildings, civil or ecclesiastical, surrounded with historic associations, or glowing with the antique beauty of mediæval days, no real archaeological lore, unless by connecting our locality with the Earls of Ulster, which would not be reasonable.” But as a consolatory antithesis he adds:—“All here is of modern origin and modern fashion; we have spacious streets, stately buildings, huge mills, and edifices of every kind and for every purpose. The life of the eighteenth century, so recent, so quaint in our eyes when a glimpse of it can be recovered, has been pushed into the well of forgetfulness. There was a may-pole in the last century at the Stone Bridge in High-street, around which the youthful population of the small town disported in rustic fashion. This, with many another custom as well, has gone the way of all gay garlands.”

Under the pen of many another author, the scanty records of early history which Mr. Benn gives us in such cautious context would have been made to glow with inferred

and reflected lustre from such associations as “Cathasach and Ultan, princes of the Cruithnians of Dalaradia, A.D., 680, with the family or tribe of Aodh Buidhe O’Neill; or the chivalric John De Curci and the De Burghs, Earls of Ulster.”

From the manner in which the author arrays his quotations and facts, and advances authorities in his first chapter, we are inspired with a confidence in his reliability as a historian, which is but increased by perusal of all the subsequent pages.

From these causes it is obvious that the work will take rank as a standard book of reference. It also approves itself, by its pleasant literary style, to the popular mind and general reader, in this latter respect as well as from its technical excellence reminding us somewhat of the writings of the late G. Windell. To enable us to judge of the scope and aims of this historical monograph, we refer to the table of contents, which shall be our guide in this brief notice.

Chapters i. to x. are devoted to the general history of Belfast till the Revolution, the first chapter having compressed into it all that could be gleaned of its early history prior to the Elizabethan era. “In the general history, the era of the great queen has been taken as the dividing line between a certain degree of barbarism and an incipient civilization. So to that period must be assigned, not the reality, but the bare proposal of a town at Belfast. When it is found that in Elizabeth’s reign Carrickfergus itself, the most noted place in Ulster, and a corporation at the time of some antiquity, contained but a few small square towers, near which were twelve or fifteen houses with doors, windows, and sloping roofs, and forty or fifty cabins resembling the round or what are called the beehive huts of the primitive inhabitants, we may well conceive what the puny efforts of Belfast must have been in the same direction, in the time, for example, of the Earl of Essex. He was here for too short a time, and was too much thwarted in his endeavours to complete any considerable pacific measure. Scattered huts around the castle and the church, without order or method, alone formed the town of Belfast in those days.” . . . .

With reference to this church and castle, we thus read:—“In the beginning of the fourteenth century the church of the district in which Belfast is, stood somewhat more than a mile from the site of the modern town. The graveyard remains, and fragments of the building were visible within memory. The edifice was called at this remote period the ‘White Church.’ At the time of the Reformation this designation was amplified or altered to that of the ‘Church of St. Patrick of the White Ford.’ At the latter time it was also called Shankhill or the Old Church. It was the mother church of the district, and to it were attached several dependent chapels or ‘alterages,’ more or less distant from the parent stem. The very first of these, named in the ‘Terrier,’ or Ecclesiastical Register, at the Reformation, and which in point of place was the nearest to Shankhill, is the Chapel of the Ford, the future church of Belfast, and on which site, or near it, at this day a sacred edifice still stands—St. George’s, in High-street.” . . .

“Whether the Castle of Belfast was built by De Curci or some of his followers, no means now exist to prove; but there is every probability that, either by his direction or that of his immediate successor the next Earl of Ulster, the Castle of Belfast was first erected, and its importance speedily established.” Here follow the references to the old Castle at Belfast, from various sources, and in succeeding chapters we have its history given, showing its relation to the Ford across the Lagan, as well as the incipient beginnings of the town.

Chapter xi. brings us to the seventeenth century, and dwells on the very interesting book of Corporate Records. The author has examined them with evident care, and gives us judicious selections, “with a few additions of similar import from other sources, collected exclusively in this chapter as being

more likely in such form to interest and attract.” We have as a foot-note a short history of this town book—an instance of the vicissitudes incident to such records.

In chapter xii. there are observations on some noted inhabitants of Belfast mentioned in these corporate records. Chapter xiii., still dwelling on the eighteenth century, gives us the topography of the town; while chapter xiv. treats of its early population. We have then in successive chapters notices of the early trade of Belfast, extinct and early manufactures, ecclesiastical history. We learn that “Belfast can claim both distinction and precedence on the score of its early printing,” and we have evidence that about the close of the seventeenth century, when the art of printing was little known in the north of England, Belfast had its printing-press.

Chapter xviii. treats of early educational establishments, seventeenth-century tokens of Belfast, early banks, the old or original dock, the first water supply, the post office, early travelling, watching and lighting, original theatres, the old poor-house or charitable society, and gradually opens into the eighteenth century and its literary connections; continuing most interesting notices on these and kindred topics in connection with the town to the conclusion of the history up to the close of the last century. We also have voluminous appendices, and a carefully compiled, useful index.

In the body of the work we have occasional illustrations and maps: thus we have Carrickfergus Bay or Belfast and its neighbourhood in 1570; plan of Belfast, 1660; plan of Belfast of 1685. Sir William Petty’s map of the Barony of Belfast; plan of the harbour with proposed improvements in 1785, and several other maps, as well as the genealogical charts, and several illustrations of the archaeological objects, such as “the inauguration chair of the O’Neills of Clannaboye,” and a “cinerary urn” which, however, can scarcely be “supposed to hold the remains of an O’Neill of Clannaboye,” inasmuch as it was not till long subsequent to the pagan era and the introduction and spread of Christianity in Ulster, that the tribe or family of O’Neill intruded itself into this part of the country.

We need scarcely refer to the get-up of this publication, which, in addition to being fortunate in its authorship, bears similar impress of the publishers’ care, and of the ruling mind which directs the Art Department of the Royal Ulster Works.

In conclusion, we have but one thing to deplore, which is that this history of Belfast stops short at the close of the eighteenth century, just as circumstances are conspiring to lay the foundation of its “modern greatness.” What could be more interesting than to have from such a hand, and while the materials are yet accessible and comparatively fresh, a reliable history of Belfast during that period included in the second and third quarters of the present century—a period in which, from being “the small town,” as Mr. Benn calls it, it arose to take its place as one of the most remarkable commercial centres of modern times? It is only from the connection of the small town with its subsequent modern greatness, that the utility or necessity of such a history as this arises. Its antecedents, devoid as they, admittedly are of “the great essentials,” or of all which would be of interest, save to a very limited few, would not of themselves call forth nor warrant such laborious research; which, although evidently a labour of love to the author, yet will be, as comparatively devoid of profit, as a foundation without its superstructure, unless the subject which this pleasant book treats of is soon followed up to the period when it becomes really important. The fourth quarter of the nineteenth century is developing in Belfast new phases of commercial life, which will more or less affect its history. While such transitions are in progress, and before the opportunity is lost, it is to be hoped that the accurate pen of Mr. George Benn will soon resume its theme.

\* “A History of the Town of Belfast, from the Earliest Times to the Close of the Eighteenth Century; with Maps and Illustrations.” By George Benn. London and Belfast: Marcus Ward and Co.



# ADVERSARIA HIBERNICA, LITERARY AND TECHNICAL.

THE churches of the district of Fingal have some noticeable archaeological features. A flat belfry with two and sometimes three pointed arches appears to be the prevailing characteristic. At Howth, Malahide, Ballyboughal, and several other places, these double and triple belfry ones may still be seen; but they were once more numerous—that is, before time and Vandal destruction laid low the buildings to which they belonged. These old Fingalian churches and their belfries have been attributed to the Danish colony, which for a period settled down and held sway in this district. We doubt that the Danes had any hand in the erection of these churches, except that portion which intermarried with the native race, and remained in the country a mixed element after the final overthrow of the Danish power at Clontarf.

Speaking of the churches of Fingal and their belfries, we are reminded of a “curious coincidence of circumstances,” to use the words of Thomas Bell, which led to the preservation of the original bells of Howth Abbey to the present time. It is presumed that at the period of the dismantling of the abbey the bells were deposited for safety or curiosity in the vaults of the adjacent castle. Early in the present century, when a new parish church was erected, a bell being wanted, tradition in the mouths of the people spoke of the existence of the former bells, and their place of deposit. They were sought, and found under a heap of lumber, but cracked and unfit for use. Lord Howth provided a new bell, and the old ones may be seen in the large hall of Howth Castle, among other relics of the past. The three original bells are supposed to have been cast in Italy, and each has an inscription around it in single line, in old Gothic characters: the first bell, “Jesu Criste Miserere Nobis”; the second bell, “Sancta Maria Ora Pro Nobis, Ad Filium.” The inscription on the third bell, which is not very intelligible, is supposed by Bell “to be the name and country or native place of the bell-founder.” The same author points to the blunder of Walsh, the continuator of Whitelaw’s “History of Dublin,” in his misquotation of the first two inscriptions, giving the words in both cases as *ora pro nobis*, omitting the word *miserere* in the second inscription; as also his rendering “*Ad Filium*” annexed to the second inscription as “*Ad Rilium*.” The mistake of a short sentence led Walsh into a curious conjecture respecting the bells of Howth Abbey. It is worth while quoting what he says respecting the words *Ad Rilium*, as he gives them:—“It is conjectured that these characters are a contraction of the words *ad domum religiosam*, and imply the bells were a donation to the abbey, and they contain a chronogram ascertaining the date. The letters M. L. I. I. standing for the numerals 1052.”

We would like to see some young or old architect, with archaeological tastes and time to spare, devoting a little time to the illustration of the still-existing and historically interesting churches of Fingal.

To take up the “Military Reveries” of Dr. St. John, of Waterford, commented upon in our former notes, let us proceed with him to his conclusions. Here is his opinion of “Music” in connection with military service in 1793, and how it might be improved upon: “Kettledrums should not be used in the cavalry, or the troops; the trumpets, &c., are much less unwieldy and more elegant instruments. The cymbals and triangles, &c., seem rather to jargonise the harmony and melody of music. The fife and drum were used in a very remote period of our history. The drum is a tremendous music, between the noise of thunder and the roar of a lion [that is not very euphonious]; the fife is a great contrast to it. Knowing the ears of the soldiery, the Irish pipes, with the drum, would inspire and delight them much.”

We have no doubt but the Irish bagpipes would be found inspiring music in the hands of an expert player, but it is awkward to handle or manipulate with its bag or bellows and knee action. The Highland pipes has a great advantage over the Irish one in the readiness by which it can be taken up, carried, and played upon march. We are unlikely now to see the Irish pipes adopted as a military musical instrument. Had it ever been intended to use it, certain changes in its form would have been necessary. We have listened long years ago to some good players of the Irish pipes, but, alas! like the Irish harpers, the race is all but extinct, and, we regret to write it, both in Ireland and in other countries a good deal of minstrelsy is associated with mendicancy; and mon, though they may exhibit lighter heels and lighter heads to the sounds of music, they are not so often prone to exhibit stouter hearts.

What has Dr. St. John to say in respect to “Arms”? Some of his remarks on this head, may, no doubt, create a smile; for if there is one thing more than another in connection with the army, which has been subjected to a great revolution, it is that of “Arms,” their manufacture and use. Our last-century critic writes:—“The stocks of the fuseses or guns should be made more crooked than they are, that the troops may make a surer aim. The stock should extend but half the length of the barrel, for lightness sake; and the barrel should be fastened to the stock, not by pins which shatter the stock, but by two steel clasps, surrounding both barrel and stock—these should be tight that the barrel rattles not. Stillness of extreme discipline is most proper. The fuseses may be larger and lighter, and of a larger bore than at present. The bayonet should have in the handle one perpendicular slit with a spring over it, to fasten on the muzzle of the gun; to take off the bayonet the spring should be pressed by the hand, and the bayonet jerked off, without a necessity of twisting it. The blade of the bayonet should be about a foot in length, or less, it would be sufficient to destroy any adversary; longer is useless, inconvenient, heavy, and less portable. The halbert is a strange instrument; the sergeants should carry fuseses and bayonets, their fire should not be lost. There is no necessity for them to look at the troops when they order them to fire; they should present along with them, giving the word at the same time. In charge the officers would find the sword less defence than the fusée and bayonet, therefore they should wear no sword, and the fusée and bayonet are preferable to the sword or espintoon. The tomahawk of the light infantry is a strange utensil; hung on the back, they are out of the way and unhandy, they are too heavy; the bayonet and fusée should totally replace them. Instead of powder-horns, the light infantry should carry packed cartridges. Artillery on horses are excellent, and should be made much use of. Regiments of cavalry, similar to the ancient, would be irresistible in a charge. In charging one regiment with another, the fusée and bayonet of one regiment of cavalry would be found preferable to the swords of the other; thus, after firing their carbines in a charge, were they to rush forward without abandoning their carbines, but with fixed bayonets, methinks the stab of the bayonet would be found to do more execution than the stroke of the sword.”

Dr. St. John was pretty right in some of his conclusions, and his good opinion of the service of the bayonet in close struggles has borne the test of time. His suggestion, too, respecting the better fixing of the stock of the gun to the barrel were also good, and have been improved upon since his time. The old matchlock has disappeared, the ramrod is following, and the breach-loader has been some years on its trial. Powder horns and shot pouches have given way in military field service to the prompt and handy cartridges. Soldiers now load and fire with a swiftness that would almost startle Dr. St. John out of his wits, were he alive to-day. Their incumbrances, though not so great as

of old, are still too many; and, though they can blow away like thunder, and advance more nimbly, they can also retreat at a pretty lively pace from the fold, if they are outnumbered by the enemy.

We now come to the final observations of the doctor on “Discipline,” without which the greatest courage is of little avail in this age. What says our last-century critic on this head?—“Artillery should be much exercised; and artillery on horses frequently transported, and marched by Matrosses, to give them a facility of quick manœuvre in time of war. Locks to the cannon would be found more handy than the match. Much of the discipline of the troops is impeded by dressing hair, their time in the morning lost, and the stiffness of their stocks and dress, much constrain the natural vigour of their limbs. The use of the bayonet is much to be depended on: one regiment of infantry, drawn out, should advance against the other, then encountering, parry, push, and toss each others’ bayonets at the muzzles of their fuseses. This species of fencing would be found useful. On their bayonets they may for security have the sheathes tied. A regiment well accustomed to such pushing would certainly make retreat a regiment that had never learned to push, and had only instinct to direct them.”

So concludes the “Military Reveries” of Dr. St. John, of Waterford. He, however, left a good deal unsaid on the head of discipline and drill which would be interesting to supply. The discipline of the soldiers of the present hour differs a good deal from that which found favour in the last century, and the drill is still a sore point with the soldier from the time he as a recruit enters the “awkward squad,” and makes his first “goose step,” to the day he takes his discharge and pension. Drill is used as a punishment, and a heavy punishment in various ways for the disobedient, fractious, or dishonest soldier in prison and out of prison, and unnecessary drill is too often resorted to with serious and fatal consequences to officers as well as men. Serious offences of course deserve condign punishment, but petty faults should be punished in the army with less rigour than they are. Of the soldier in himself, and as a fighting machine in the service for kings and countries who enlist him, much could be said, but it would be out of place in these pages. A patriot soldier is one thing, but an army of aggressors, might trampling upon right for purposes of plunder and conquest, are a terrible evil; and we hope that the time will come through the force of public opinion and science that standing armies will be abolished.

Among the precepts of Lord Burleigh there are some suggestions worthy of adoption. Chesterfield, of Irish Viceroy fame, gave advice to his son in a series of well-known letters; but Burleigh, who was Secretary of State in the reigns of Edward VI. and Queen Elizabeth, and afterwards Lord High Treasurer of England, penned some pregnant counsel to his son Robert (by his second wife), who afterwards became Lord Salisbury. Here is one of Lord Burleigh’s precepts, which will be found as useful to-day for following as when it was written:—“Live not in a country without corn or cattle about thee, for he that putteth his hand in his purse for every household expense is like him that keepeth water in a sieve. And what provision thou shalt want, learn to buy it at the best hand; for there is one penny saved in four betwixt buying in thy need and when markets and seasons serve fittest for it. Be not served by kinsmen, or friends, or men intreated to stay; for they expect much, and do little; nor with such as are amorous, for their heads are intoxicated. And keep rather too few than one too many [servants or retainers]. Feed them well and pay them with the most; and then thou mayest boldly require service at their hands.” Sound advice this, if it could always be followed.

On another occasion we will return to some more of Lord Burleigh’s precepts, for what



is good in them has been seasoned by time, and what is unsound is of course inapplicable for present-day adoption. H.

### LIGHT AND AIR.

AMONG the popular Monthly Law Tracts edited by Mr. James Ball, and issued by C. Jacques, of Kenton-street, Brunswick-square, W.C., and also by the Butterworths, her Majesty's law publishers, Fleet-street, is one on "Light and Air." We consider this is a very valuable law tract, from the importance of the questions discussed; and in view of recent cases, and one in our midst, we would strongly recommend its perusal to architects, builders, surveyors, and house owners. Several cases are cited by the editor which have formed precedents, and, as it were, regulate the law of the subject. The distinction between light and air is defined; but, to put it in a nutshell, the author thus summarises the ordinary rights at issue:—

"The right to light and the right to air are easements which one man has coming over the property of another to his own; and that these easements are distinct. Twenty years' enjoyment of the easement of light gives a prescriptive right to it: in the absence of agreement to the contrary. Obstruction of light, which interferes materially with the comfort and convenience of those affected by it, is an offence which the court is prompt to remedy; but injury to health or other serious effect is considered a necessary ground for the interference of the court in cases of diminution of air. Possible future damage is now taken into account as well as present damage. Vendors should reserve to themselves the easement of light when selling land adjoining their house property, in order to secure light to their houses. The right of easement of light accrues in respect of unfinished or unoccupied houses which have windows capable of receiving light during twenty years of prescription. There must be no unity of possession of the easement, and the land over which it comes, during the twenty years' enjoyment of the easement upon which the prescriptive right depends, but unity of possession only suspends the prescription during the unity, and does not destroy or make unavailing the enjoyment of the right before the unity."

In his concluding remarks the author very pertinently observes that there are some cases in which litigation must, it would seem, inevitably arise. To guide to a proper action in such cases he makes a suggestion founded upon the principles of the decisions as to the evidence to be adduced in support of them. He recommends that when the obstructive building is already erected, the evidence of the persons occupying the premises whose light is obstructed should be obtained; this, he thinks, will have far greater weight than any scientific theoretical evidence; and the latter will not have much weight, even though supported by the exhibition of models, compared to the former. But if the buildings are only in course of erection, and there be only a threatened invasion, models then, he thinks, should be exhibited to the court, and theoretical evidence given as to the result which would follow from the erection of the proposed buildings. This advice, we think, is sound.

### SOUTH KENSINGTON SCIENCE AND ART DEPARTMENT.

A LONDON evening contemporary has been subjecting the management at South Kensington to a severe handling in showing "how the money goes." In its latest strictures the journal in question says:—

"It is unpleasant again to revert to the waste of public money on the abortive scheme of a Loan Collection of Instruments in South Kensington. But as the whole question will shortly be discussed in Parliament when the South Kensington accounts are gone into, it may be as well to point out some glaring discrepancies in the return. A few of these we have already called attention to, but others yet remain. For instance, though the total expense of the 'show' was £15,000, not more than £2,300 are accounted for, leaving the public to form their own opinion of the propriety of the way in which the other £12,700 were spent, or even to doubt whether the whole expense of the exhibition is exhibited in this 'return.' What do these £13,000

so passed over include? Glass cases and other furniture? Was this large sum expended on *douceurs* to the Foreign Committees? For though this fact is not generally known, it is no less true that the Foreign Committees abroad which were formed by the manager and promoter of the show, and for which he charged smartly in the shape of "travelling expenses," were so undignified as to accept the reimbursements of their expenses from the pockets of the British taxpayer. Fancy what would be the opinion of the English nation had our representatives at Philadelphia asked the American Government to repay them for what it cost to arrange the British goods in the Centennial Exhibition! Yet this was exactly what the German Committee did. At all events, the Science and Art Department paid the expenses of those representatives who, "in the cause of science," and "for love of knowledge," collected a number of instruments, which could be seen in almost any optician's, for the sake of a gratuitous advertisement in South Kensington. The German Government refused to assist the exhibition with a single pennig. A scientific contemporary, in noticing this remarkable fact, points out that it is very significant of foreign opinion of the worthlessness of the collection, since no Government in Europe is more liberal in promoting scientific work of every kind than that presided over by Prince Bismarck. To glance again at the accounts of this sad business, we find a small sum under the head of (b) "fees for catalogue." This sum, from the smallness of it, cannot surely include the publishing of the catalogue, and the editing and publishing of the "Handbook"? What then does it refer to? It is thus perfectly plain that the South Kensington accounts require a thorough overhauling. The small est political job is mercilessly eviscerated by the Press, while under the specious head of "Assistance to Science and Art" the most gigantic misapplication of the national funds is going on every day, almost unheeded simply because unknown."

### BOOKS RECEIVED.

*The Rise and Fall of the Irish Franciscan Monasteries, &c.* By C. P. Meehan. Fifth edition. Dublin and London: James Duffy and Sons.

PRESSURE of other literary matter and reviews obliges us to hold over a detailed notice of the new edition of this work. No notice which could be given would be at all commensurate with the importance of the work itself, from a strictly national and historical point of view. The appendices are in themselves valuable contributions to the page of Irish history; and the Rinuccini documents, now given for the first time, fill a great blank in the annals of this country. Apart even from the ecclesiastical character of the work—if we really can view it apart—the materials of the volume will be indispensable to the native or foreign historian of the future, for it is full of side lights. There is literature and learning, war and peace, untiring toil and nearly unceasing trouble throughout the lives of the men whose thoughts and actions have built up this volume. The past has not buried its dead, for here they arise again, in the spirit if not in the flesh. It is not only with the great and disembodied of the City of the Confederation that we again commune, but with the equally great and "world-divided Gaels," long departed, to whom the roads of Ireland and the Continent were well-known highways, and the courts and colleges of Europe welcome homes or asylums. We will write no further at present, except to say that the fifth edition is a great improvement upon the former ones, in mechanical get-up and through the additional historical materials it contains.

Messrs. Cassell, Petter and Galpin send us Part 8 of their well-printed "Dictionary of Mechanics," and also Part 1 of their "Domestic Dictionary." This latter is accompanied with a large plate on fine paper, from the picture by C. E. Perugini, entitled, "A Labour of Love." The work is to be completed in 20 parts.

Of all the coloured representations of the Colorado Beetle (*doryphora decemlineata*) that have reached us, that issued by the Messrs. Hardwicke and Bogue, of London,

we consider the best. It is shown as highly magnified, and printed on plate paper 13 x 10. In noticing a similar (though very dissimilar in get-up) representation of this pest, a facetious writer in the *Newry Telegraph* says:—"My own impression is that Colorado will not be so green as to come to the Emerald Isle; and, if he should come, now that we know him, he will be much greener in a short space of time if there be any virtue in Paris stuff!"

"The Journal of Forestry" for August reaches just as we go to press. Its contents appear to be as varied and interesting as previous issues.

### CORRESPONDENCE.

#### "LEARNED JUDGES" AND BUILDERS' BILLS.

TO THE EDITOR OF THE IRISH BUILDER.

SIR,—Permit me to direct your attention to the remarks of the learned Recorder on the 27th inst., in the case of Cormack (builder, Talbot-street,) versus Flynn (Parliament-street),—in which the former sued the latter for amount of extras on some houses recently built in Sherrard-street, and the latter, in the majority of items, disputed payment. The Recorder, with most commendable patience, waded through the plaintiff's bill, consisting of a large number of items of varying amounts, and heard the versions and opinions as to liability, &c., of the respective parties. However, the bill ultimately turned out to be rather a "Gordian knot," and the complacency of his lordship was somewhat disturbed (and very reasonably so) in trying to solve it; for, said he, "how can I be expected to know the difference of value between the setting of open and of close ranges; of white deal and pine; of tiling and so forth?—all this should have been arranged by arbitration with skilled parties, who, with the specification and builder's bill in hand, should view the work done, and save the time of the public and my own (the case occupied an hour or more!); and for the future, I shall adopt the rule invariably observed in the English courts, of transmitting such cases to be settled out of court by those whose profession enables them to know the value of work, materials, &c." The foregoing is a substantially true, but not a *verbatim*, report of his lordship's words—the result, after much investigation, being a decree for plaintiff for £30; and I am sure that your readers will endorse them for their force and justice. Surely all "such cases could be settled out of court," for, when an attorney is consulted, and he again consults his counsel (both having to be fed) about a building question in its numerous shapes and forms, what do either of them know about the details, till some skilled "expert" (a term not uncommonly applied) instructs them what to *brief* and what to *say*? From my observation and experience during a series of years, I can vouch, that "learned judges" would rather try any case than a building case; and I quite remember ex-Chief Justice Monahan, after being worried for twelve days or so in trying the case of Kempston v. Butler about proper "bracing, propping, strutting, &c., &c.," exhibiting very unmistakable signs of uneasiness (not unexpressed either) when "another building case" was called upon; and I also remember, when I was a witness in Castlebar in the case of *Canning v. Loughran*, the present Lord Justice Christian (then Mr. Justice) said that it should have been settled by arbitration and not in court.

JOHN J. LYONS, Architect.

Great Brunswick-street, July 30th.

### SANITARY SINNERS.

THE following is reported amongst the proceedings of the Abbeylax Board of Guardians by the *Leinster Express*:—

Sub-sanitary officer Dobbs reported that closets from houses of the Rev. Mr. Fisher and Dr. Stoney emptied into the "sewer" which runs through the Main-street, Abbeylax.

Mr. Talbot—I thought Dr. Stoney was a sanitary officer himself!!

Clerk—It is Mr. Dobbs' duty to call Dr. Stoney's attention to the matter.

Mr. Talbot—Dr. Stoney should call his own attention to it. Three-fourths of the money we pay for sanitary purposes goes away for nothing!!

Mr. Foster said he was of a similar belief.

The Clerk asked what was to be done regarding Dobbs' report?

Mr. Talbot—Take the usual course, and serve them with notices.

This was agreed to.



## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

DURING Foote's engagement in Dublin in 1757, as previously alluded to, young Tate Wilkinson made his bow to a Dublin audience, and continued for some time to attract notice by his mimic powers. Like other English actors who obtained a popularity afterwards, Tate Wilkinson owes not a little to the kindly reception he met with in this city, which paved the way for subsequent engagements and successes in the sister capital. At this lapse of time it is very difficult to estimate the exact merits of Wilkinson, for he seems to have been a curious compound of good and bad features as a man and an actor, though most but not all of his critics agree in according to him the possession of extraordinary mimic powers. Thomas Campbell considered him one of the most marvellous mimics that ever lived; while our own Churchill—a critic whom we have had to acknowledge was often unjust—writes down Wilkinson—

"With not a single comic power endued,  
The first a mere, mere mimic's mimic stood."

It is stated in the "Life of Mathews" that Wilkinson "was indeed a polished gentleman in private life, and even as a manager his liberality was conspicuous." Leigh Hunt describes him as one who "had been a little too merry in his youth, and was very melancholy in his old age. He had a wandering mind and a decrepit body, and, being a manager of a theatre, a husband, and a rat-catcher, he would speak in his wanderings 'variety of wretchedness'; he would interweave, for instance, all at once the subject of a new engagement at his theatre, the rats, a veal pie, Garrick and Mrs. Siddons, and Mrs. Tate and the doctor."

The disjointed state of Wilkinson's memory, according to the "Records of a Veteran," gave rise to a hundred anecdotes:—"Well might Mathews say that he seemed to have cut his words separately out of a dictionary, thrown them loose into a sack, and shaken them forth again promiscuously." The following anecdote is given by Wewitzer:—"When Tate Wilkinson first appeared on the stage, he applied himself principally to mimicry, which he succeeded so well in as to meet with universal applause. Among the various characters he took off was Luke Sparks, the player, who felt it so powerfully that he made a formal complaint to Mr. Garrick. Garrick, who himself smarted under the lash of the mimic, laughed it off, and said, 'Come, come, Luke, you had better take no notice of it; consider, if you are mimicked, it is in good company!' 'True,' said Luke, very gravely; but I have known many a man ruined by keeping good company.' The Luke Sparks alluded to was a well-known actor both on the Dublin and London stages, and was accounted equally good in tragedy and comedy. He died in 1767. In an article in *Blackwood's Magazine* for 1839 it is written, 'Tate Wilkinson was a humorist by nature, and a great deal more of the humorist by art. Possessing some natural faculty for imitation, his manners were a perpetual burlesque; yet with all this affected eccentricity, he had a perfect sense of his own interest, had a subtle knowledge of mankind, managed his theatre with considerable dexterity, and contrived to live handsomely on the profits of a pursuit which has probably produced more broken fortunes than any employment on record.'

Let us now turn to the pages of Hitchcock—a man who knew Wilkinson well, both in connection with the Dublin, York, Hull, and Leeds theatres. Writing of Foote and the introduction of young Wilkinson through the former, Hitchcock says:—"At his tea-table he introduced a young gentleman as a pupil to Mr. Puzzle, who soon attracted the attention of the town, and deserves particular mention. This young gentleman's name was Wilkinson, the son of a clergyman of excellent character. Mr. Wilkinson, from his earliest years, discovered a peculiar incli-

nation for the stage, which, as he grew up, ripened into a settled determination of turning actor the first opportunity came. In consequence of this design he constantly frequented theatres, and as he possessed extraordinary powers of imitation, few of the performers of any merit escaped his critical notice. About this time chance threw Mr. Foote in his way. Struck with the eccentricity of his genius, and the particularity of his manner, our hero's lively imagination delighted in exhibiting his peculiarities in which he was remarkably successful. Finding Mr. Foote engaged at Dublin, he voluntarily offered to accompany him over at his own expense. This being immediately accepted, they both arrived early in winter. Mr. Foote, being obliged to return in December, our young hero thought this a good opportunity for trying his abilities. He therefore determined to remain behind, and soon after commenced his theatrical career with great *eclat*. Diffident of his own powers, he at first only ventured to treat the audience with tea (as the entertainment was called) in Mr. Foote's manner. His success in this attempt was so great, that it emboldened him to higher pursuits; and, having played Cadwallader in the style of the author with remarkable applause, and given imitations of Mrs. Woffington, Mr. Sparks, with most of the capital performers, and even Mr. Foote himself, with great truth and humour, he on the 19th of January ventured on the arduous task of supporting the very difficult character of Othello. In this, however, as he was perfectly conversant with Mr. Barry's style and manner, he greatly exceeded public expectation. After this he appeared in several other characters with much reputation, and having obtained an excellent benefit, he returned to England highly satisfied with his first essay, and much pleased with the liberality and hospitality of the Irish nation."

Of his merits as an actor, and his success as a manager of a theatre, Hitchcock further adds:—"In justice to Mr. Wilkinson it must be acknowledged that independent of his powers of mimicry, he possessed capital abilities for the stage. I have spent several happy years under his command, and, as far as my judgment can bear testimony, I have during that time seen him perform a variety of characters in tragedy and comedy with great truth and merit. So very flattering was his reception in Dublin at that time, that we afterwards find him making short, pleasant, and profitable excursions to Ireland, whose audiences he always professed the highest veneration for. Fortune a few years afterwards placed him at the head of the theatres royal, York, Hull, and Leeds, patentee and sole proprietor, as respectable as any out of London, where he has realised a considerable property, and over which theatres he still continues to preside with the highest credit, an excellent manager, universally believed and esteemed by those who have the happiness of his acquaintance."

Thus wrote Hitchcock towards the end of his first volume of "View of the Irish Stage," published in this city in 1788. Tate Wilkinson was born in 1736, and died in 1803. In 1791 Wilkinson gave the world "Memoirs of his Life," a volume which has been subjected to some severe criticism, but, notwithstanding, it has a value from an Irish as well as an English point of view, for in it are given some interesting particulars of matters in connection with the Irish Stage and the Dublin theatres during his theatrical career.

Percy Fitzgerald, in dealing with his hero Garrick, deals a severe thrust at Wilkinson. He thinks the mimic actor's abilities were much over-praised by his friends; and, concerning Wilkinson's memoirs, he somewhat savagely writes that he "has left behind him a very curious history of himself and other players, which is a mass of truth, blunders, and falsehoods—a mass, too, of meanness, vanity, and egotism."

Verily it is difficult to arrive at the truth amidst so many conflicting opinions. Wilkinson was not, of course, a great actor like

Garrick or Macklin; both the latter actors, like others of a similar or nearly equal calibre, evidenced in their career vanity and egotism, and some of them considerable meanness. The theatrical life is full of jealousies and ambitions, and it is impossible to find one great actor or actress but has had their faults. Biographers, too, are prone to paint favourable pictures of their heroes and heroines, and we must be content with the "mass of truth" in the pages of Wilkinson, along with the drawbacks spoken of. In consequence of Wilkinson's early connection with the Irish stage, and his frequent appearance thereon in after years, we considered that he was entitled to more than a mere passing notice. We have not held him up as a model, but we have presented his picture as it has been painted by others, and the conclusion we are forced to draw is, that he was a remarkable actor, though not a great one.

But to take up the thread of our history. The approaching opening of the new Crow-street Theatre gave rise in Dublin to considerable discussion. Each side had its friends and partisans, and newspapers and pamphlets were utilised to show the good effects and the bad effects likely to ensue from a theatrical opposition, and the existence of another theatre. It would be a wearisome task to even summarise the arguments put forward by the friends of the rival parties on either side. Mr. Gilbert, in his History of Dublin, summarises some points of interest in connection with Sheridan's motives and management, of the date of which we are writing: "Sheridan having arrived at the conclusion that the Dublin stage could never remain long in a flourishing condition whilst it was the property of a private individual, intended to have submitted to Parliament a proposal that his interest in the lease and property in the theatre and scenery, wardrobe, and decorations, should be purchased for the use of the public, in consideration of which he was willing to undertake, during the remainder of his term, the payment of three pounds per night to the Dublin Society, to allocate one pound per night to the supply of the wardrobe and repairs of the scenery, and also to allot the receipts of four nights in the year to the sole benefit and advantage of five public charities."

Spranger Barry's project of a new theatre dissipated altogether the above proposal of Sheridan, and, anticipating the various effects of an opposition, the latter made the following proposition to the subscribers of Crow-street Theatre, based, it may be added, on the supposition that his plan above alluded to would be adopted:—"Let all further progress in the theatre of Crow-street be stopped. The theatre in Smock-alley shall be opened next winter to Mr. Barry, either at a certain salary, superior to what he ever received yet, at a moiety of the profits, or it shall be let to him at a reasonable rent. Early in the next session let the subscribers to Crow-street Theatre join Mr. Sheridan in an appliance to Parliament for a fund to establish one good company of actors in Dublin. Mr. Sheridan, though he has laid out upwards of £9,000 (which he is ready to prove) in bringing the theatre to its present state, besides all his labour, risks, and trouble, is willing to make over his whole property to the public, of his clothes, scenes, interest of his least, &c., for the sum of £400. Let the present subscribers to Crow-street apply for £2,000 to finish their house, which will make it a more certain tenure to them, and afford a better security for their money than if it should be finished by future subscriptions, which will bring such a load upon it as no theatre will be long able to support. As the stage is larger and more grand, let all tragedies and such pieces as require any magnificence of show be represented there; let all comedies be performed at Smock-alley. This will occasion an agreeable variety; let one good company be engaged to play in both houses; let the proprietors of the united theatres be admitted only to the plays at Smock-alley; the same with respect to those of Crow-street."

\* See ante.



Sheridan's propositions were disregarded; and the love for novelty, coupled with other circumstances that shall appear as we proceed, paved the way for the new aspirant to the favour of the Dublin public. "Besides," writes Hitchcock, "many circumstances operated in favour of the new theatre. Mr. Barry had ever from his first attempt been a peculiar favourite with the public, and stood remarkably high in the general opinion. With justice he was allowed to be, without exception, in a particular line, the first actor of the age. In private, persuasion dwelt upon his tongue; he had the happy art of accommodating himself to the foibles and peculiarities of every person he conversed with, and his rhetoric never failed to accomplish the most difficult points he had to carry. In public, his extraordinary merit, beautiful figure, engaging manner, and the interesting cast of parts he played, all served to establish his fame, and render him uncommonly popular."

Of Woodward, who joined Barry in his Crow-street speculation, Hitchcock observes that he "was a plain, honest man, much admired in Ireland, who, by great professional merit, had saved a tolerable fortune, which ambition urged him to venture upon a very uncertain foundation. These circumstances with the aid of a new company, new theatre, &c., seemed to preponderate the scale against the old house."

All doubt being at an end, and Barry's house finished and engagements made, the new theatre in Crow-street opened on the 23rd of October, 1758, with an occasional prologue, spoken by Woodward, after which followed the comedy of "She Would and She Would Not: or, the Kind Imposter." The company, as may be seen, was not a very brilliant one, from the cast of the characters, for, with the exception of King, the most of the names were unknown to fame. In the above comedy Don Manuel was sustained by Mr. Arthur, of the Bath theatre; Don Phillip, Mr. Jefferson; Octavia, Mr. White; Soto, Mr. Layfield; Diego, Mr. Mynitt; Don Lewis, Mr. Read; Corregidor, Mr. Younger (subsequently a prompter at Covent Garden Theatre); Trapante, Mr. King; Rosara, Mrs. Knipe; Flora, Miss Willis; Villeta, Mrs. Mynitt; and Hypolita, Mrs. Jefferson. The first night did not draw a numerous audience, but it seems those present were highly pleased with the theatre, the scenery, and decorations. The new manager on the second night, says Hitchcock, "gave the town a specimen of the abilities of the musical part of their company in the 'Beggars' Opera,' when that excellent singer Mr. Vernon made his first appearance in Macheat; Mrs. Pye was the Lucy; Mrs. Chambers, a sweet singer and very pretty figure, was the Polly. These, with a hornpipe from the celebrated Aldridge, constituted the novelty of the evening, and pleased better than the preceding, yet, when repeated the night after, did not bring above twenty pounds." These thin houses soon alarmed the managers, and they resolved to take the field sooner than they intended. Barry came forward on the 3rd of November in Hanalet, and scored a triumph by a crowded and brilliant audience, and hopes were once more raised, and matters went on smoothly.

## LAW.

### "ANCIENT LIGHTS."

COURT OF APPEAL.—July 16.

*Sir James W. Mackey v. Scottish Widows' Fund.*—This rather important case, which was an appeal from the Vice-Chancellor, has excited considerable interest in this city. The firm of Sir James Mackey is of old standing, and the building that gave rise to the suit is that of an insurance company known as the Scottish Widows' Fund. The case is remarkable also from the fact of the severe animadversions the Lord Justice of Appeal felt in his own mind it was incumbent to make respecting the "Council of Law Reporting," and the manner in which their work

is done. *En passant*, we may observe that for the report which we give we are indebted to one of the daily papers, which deserves censure as severe as that which his lordship visited upon the Council of Law Reporting. As a specimen of law reporting and typography, it "bangs Banagher." We would almost be committing a crime not to give the version as we find it with all its imperfections and involutions on its head, as a warning to other compositors, press correctors, sub-editors, &c., to "mend their line and sin no more." A copy of the morning paper in question should be sent to the Caxton Exhibition.

The Lord Chancellor said that the appeal was taken by Sir James Mackey from a decree of the Vice-Chancellor made on the 17th April, 1877. Sir James Mackey has since the year 1859 been the owner, under a lease dated 1st September, 1859, for a term of 31 years, provided the *lessee*, who is still alive, should so long live, at the yearly rent of £110, of the house and premises No. 40 Westmoreland-street, in the city of Dublin; and since the date of the lease the appellant has carried on in said house and premises the business of a seed merchant, in which he was extensively engaged, the upper part of the house being used partly for business and partly for dwelling and sleeping rooms. The rear of the house faces towards the east, and in it there are eight ancient windows. The back drawing-room window of the house also looks towards the east, and it was the darkening of this ancient light that was the cause of the present controversy. This room was also lighted from the south side, and it was not a bright room, but, such as it was, there was sufficient light to carry on the retail business of the shop, where parcels of seeds were selected, made up, and sold to customers. The defendants purchased the next door premises, situate at the corner of Westmoreland-street and College-street, and the defendants have lately purchased from the landlord the reversion in plaintiff's premises, with a view of extending them, when and so soon as the plaintiff's term shall have expired. The defendants having removed the ancient buildings, built a palatial establishment on the ancient foundation, but to a height far exceeding the height of the old building so removed. On 28th February, 1876, the plaintiff applied to the Vice-Chancellor for an injunction to restrain the defendants from obstructing his ancient lights, and for an order to remove such buildings as interfered with them. The Vice-Chancellor, by his decree, decided that the windows in question were ancient lights, but that no substantial or material diminution occurred of the light or air which of right belonged to or were enjoyed by those windows prior to the erection of the defendants' new premises, and accordingly he dismissed the plaintiff's bill with costs, and from this dismiss the *plaintiffs* have appealed. The case was argued for several days during the last Term, and he (the Lord Chancellor) arrived at the conclusion that the Vice-Chancellor's judgment must be reversed, though serious doubts have presented themselves to his mind whether the case was one fitted entirely for an injunction, and whether damages would not under Lord Cairns' Act (1858) be the proper *degree* [decree?] to make; for by that Act, sections 1 and 2, it was made lawful for the Court of Chancery to award damages to the party injured. But his doubts were removed by the fact that the defendants had undertaken to abide any order that the court might make at the hearing.

The Lord Justice of Appeal did not share with the Lord Chancellor the difficulty that presented itself to his lordship's mind in reversing the decree of the Vice-Chancellor. The plaintiff has, in this case beyond all doubt, established the fact that he had acquired a right to this ancient light, a right which is equally known to them to have existence as well in cities as in country places. The bill was filed for the injunction before the building was raised to the obnoxious height of 20 ft. above the plaintiff's premises, and that bill informs the court that the room was not at best a well-lighted room, but that there was sufficient light to enable the plaintiff to carry on there the retail business of his establishment, a department which was conducted in that very room for many years. In this very room there was a variety of seeds, which it required a nice light to select and weigh, and make up into parcels; and it was from this room that the shop was supplied with garden seeds. Well, all these delicate operations were carried on by the light that streamed in through the window, and as a matter of principle, it appeared to me as it appeared to Vice-Chancellor Kindersley in the case of *Martin v. Headon, reporters* [reported?] in these admirable reports, the *English Law Reports*, 2 Equity, 434, that the right which a man has to receive into his ancient window

a certain supply of light over or across another man's land, is just as much part of his property as his land or his house, and is just as much entitled to protection as any other property. It may be, indeed, said that the damage done by his neighbour's act may be so trivial as not to justify the interference of the court. But wherever it is shown that the comfort and enjoyment of a man or his family in the occupation of his house is seriously interfered with, and still more, where he is prevented from carrying on his business with the same degree or advantage as theretofore by reason of the obstruction of light by his neighbour's new buildings, there is sufficient ground for the interference of the court. And it appears to me that in this case there is that degree of diminution of light and interference with the advantageous carrying on the plaintiff's business, which justifies the court in giving relief. The Lord Justice then dwelt at considerable length on the pleadings; and passing from the pleadings to the proofs, he would observe shortly on the evidence. The plaintiff had examined eighteen witnesses, and these may be subdivided into the *natural* witnesses, the *made* witnesses, and the *scientific* witnesses. The natural witnesses were those whose evidence was grounded on the observations of many years. The made witnesses were those professional men, architects—such men as Mr. Carson, Mr. Alexander, and Mr. Edmondson, experts; and the five scientific witnesses I have thus arranged in the order of their credibility, putting the natural witnesses first and the scientific witnesses last; and of natural witnesses the defendants have not favoured us with even one who ever knew the premises in their original state, while the defendants [plaintiff?] have called six—other witnesses unimpeached, and they state that the room is rendered utterly useless by the towering structure next door, so that the plaintiff had to abandon the back drawing-room and betake himself to the room on the upper floor. But the defendants—how do they support their case? Their evidence is purely scientific. Mr. Grubb is their scientific witness, whose scientific opinion is in the teeth of the common-sense opinion of the plaintiff's witness, who must have been struck with a blindness not to see with him the great increase of light in the room. Now, which of them am I to believe? Am I to believe in the mathematics and in the optics of Mr. Grubb rather than in the common-sense observation of the man who was *duly* weighing out the seeds, that he must judge by the light brought to bear upon them. Mr. Grubb, whose nice experiments on light, with his mimic sun and his mock horizon, and his decimal fractions, tells us that throughout the year—that for fifty-nine days, as a matter of astronomical observation—the sun only shines into this room through that ancient light for 15 minutes and 28 seconds each day. But Mr. Carson, the eminent architect, and the other made and natural witnesses, swear that they saw the sun shine in at the window. I then am of opinion that the defendants have failed in their defence, and that the Vice-Chancellor's decree must be reversed, and reversed with costs. The defendants have nothing to complain of here. They went on building the *towering edifice*, with lofty *conical roofs*; they cannot complain if the court now directs them to take down what they have in their presumptuous folly with a high hand and in an overbearing manner raised. There is one matter that I must allude to. The case may not rest here, it may go to the House of Lords, and the Lords' decision to have the judgment of the judges delivered in the court below before them, and I shall be happy at any time to place my judgment in the hands of the counsel, and in no other way can they obtain a proper report of my judgment; and I beg to inform the counsel and the public that any report that may be attributed to me in the pages of the Irish reports, whether in this case, or in any other case since last May number, I repudiate as spurious and unauthorised. I have intimated to the managers of that bad publication that it has ceased, as far as I am concerned, to report what I say. I would rather abstain from making any further remark on the misreporting of the Irish law reports. Long and close observation forces me to say that this trashy publication does not convey a report of what goes on in our courts. A notification has been issued by those who are pleased to call themselves the Council of Law Reporting, and they say that they will publish my judgments, and they have intimated to me that they are determined to persevere. I know more of reporters' notes than they do. And I can form a good estimate of those law reporters, and if they presume to publish my judgment, I say that their reports of my judgment are as worthless as blank paper. The entire system (if it be a system) of reporting in that publication is absurd. When months and months had elapsed after judgment had been delivered, I have had not unfrequently to write my judgments all over again. If taken by the reporter there is a resemblance be-



tween what is attributed to me as having said, and what I did say. When there is something of no use to the reader there may be a fair report, but the moment it passes into a nicety, these reporters' reports become utter nonsense. I wish the reporters there would be good enough to spare themselves the trouble of stringing together so much stuff. Can it be that the council who argue with ability there can or do not observe the nonsense they are reported to have uttered? Now, on this Council of Law Reporting there are men high at the bar whose names appear as the council to give the deception weight, in the same way as great names appear on prospectuses to catch the eye. Let me remind those gentlemen that their names are involved in those mischievous productions which they have, perhaps, never troubled themselves in looking over. What are the pages of those law reports stuffed with? Inanities. This Council of Law Reporting is a mere elique. [Here Mr. Jellet, Q.C., a member of the Council of Law Reporting, rose from his seat, and left the court.] It is not very long since the case of *King v. Malcomson* occurred in this court on appeal from the Master of the Rolls. It is reported in the Equity series of the Irish Law Reports, vol. ix., page 429. In one of his telling judgments the Master of the Rolls—and that judge is unrivalled on the Bench in the United Kingdom—had in language of extraordinary vehemence spoken of one of the solicitors of this court. Well the case and the judgment was reported *verbatim*, occupying six-and-twenty of the pages of that worthless work. The defendant appealed to this Court, and they reversed the decree of the Court below, judgment being delivered by both the Lord Chancellor and by myself on the 18th of last January. And how is the report of this, the highest Court of Appeal, reported? In six lines, thus—"King v. Anderson.—The decree of the Master of the Rolls in this case was reversed, and the bill dismissed with costs—no costs of the appeal," and my judgment is thus happily summarised.—"The Lord Justice of Appeal dissented from the inequitable observation applied in the judgment of the court below as to the conduct of the defendants' solicitor, Mr. Edmund Power." One would have thought that common justice would have induced those gentlemen, who call themselves the Council of Law Reporting, to report in as full and ample a manner the judgments exculpating that respectable solicitor from the charges made against him in the court below. Not a sentence of which (?) was said on that day is given, while the judgment of the Master of the Rolls has been preserved for an enemy of this most respectable gentleman to cast in his teeth, and to cast in the teeth of his children after him, and all the vindication he or his children will have is that contained in the Irish Law Reports that "the judgment was reversed with costs, the Lord Justice of Appeal dissenting from [from?] the exculpatory observation." That is the way that it pleases the Council of Law Reporting to report the judgments of inferior judges, and to leave unreported the judgments of the superior court, reversing their decision, and trampling on the dictates of fair play and honesty. Reporting was once, when I was at the bar, respectable in Ireland, but reporting is now despicable. When I take up those Irish reports I feel ashamed to think that this miserable falsifying publication is under the guidance of Queen's Court [Counsel?], some of whom are chairmen of counties—with one of her Majesty's Court [Counsel?] for an editor. See what a stuff those reports have, and *Parturit montes nascitur ridiculus mus*. Thirteen separate tribunals, for the learned reporters to carry on their operations upon. Now take up the English reports—the July number—and see, there are 190 cases, while in the Irish there are 24, that is to say that the English reports are eight times more comprehensive. Not alone do these reporters, who favour the profession with their reports, write in the law reports, but also in the newspapers, for they are one and the same. I hold that the duties of the court reporters and the newspaper reporters are incompatible. I have now merely to add that I must protest against the Irish law reports being stated to contain any judgment of mine, and if a truthful report is wanted from me I am ready to supply it.

The Lord Chancellor thought that with reference to the observation just let fall by the Lord Justice of Appeal, he hoped that his lordship would reconsider his determination, for no judge can prevent his judgment being misreported by those who have not the advantage of the judge's manuscript.

The Lord Justice of Appeal, while having the highest respect for the Lord Chancellor, declined to alter his determination.

A conversation then ensued as to the form of the decree, and their lordships reversed the order of the Vice-Chancellor.

At the end of the report in the newspaper we take it from, it is said "the case is still

at hearing"! We suppose this was inserted in order to keep up the interest after the corpse was laid. If the reporters of the law reports and those in the daily papers in this city are one and the same, as the Lord Justice of Appeal has said, the sooner a change is made the better. The reproduction of the above newspaper report in a law publication would not only be scandalous, but atrocious.

In respect to the judge's decision, we hope it will be accepted as final, and that there will be no more vexatious and expensive litigation. Arbitration ought to have been accepted on both sides originally, for an amicable settlement of the difficulty.

#### THE COLONY OF VICTORIA.\*

THE book before us is the second edition of the "Victorian Year-Book for 1874." To all interested in this rapidly-improving colony we can recommend a close perusal of its varied contents. In the first chapter we have the Discovery and Early History of the Colony; and an account of the early settlers. In order to promote the occupation of land, an act was passed in 1869, which has so far accomplished its object. Its main feature is free selection before survey—

"The selection is held under license during three years, within which period the licensee must reside on his selection at least two and a-half years, must enclose it, cultivate one acre out of every ten, and generally effect substantial improvements to the value of 20s. per acre. The rent payable during this period is 2s. per acre per annum, which is credited to the selector as part payment of the principal. At the expiration of the three years' license, the selector, if he obtain a certificate from the Board of Land and Works that he has complied with these conditions, may either purchase his holding by paying up the balance of 14s. per acre, or may convert his license into a lease extending over seven years, at an annual rental of 2s. per acre, which is also credited to the selector as part payment of the fee-simple. On the expiry of this lease, and due payment of the rent, the land becomes the freehold of the selector."

The Crown lands sold in 1874 amounted to 531,538 acres, realising £579,051, or an average of £1 1s. 9d. per acre. The land sold by auction brought £1 17s. 4d. per acre. This sale of lands has tended to reduce the number of squatting runs. As to cultivation, there has been a considerable increase in the production of wheat and green forage; but farmers find stock-breeding more profitable than tillage. Green fodder for cattle covered about one-fourth of the land in cultivation.

In the "Digest of Statistics" we find that building societies have been in existence in Victoria from an early period. In 1866 there were 26, and in 1874 there were returns from 60, with 20,303 members, with assets £2,284,202. There as in our own country the building societies receive money on deposit, and compete successfully with the banks in the matter of interest allowed.

Under the same heading as above we have the following in reference to Libraries:—

The Melbourne Public Library was opened on the 11th February, 1856. At the time of its opening, only a small portion of the building had been completed. Very important additions have, however, been made to it since, but it is still unfinished. The total cost of the building to the end of 1874 was £107,990, all of which was provided by the Government. The further aid it received from the State in the same period was £107,269, of which £14,876 was received during 1874. Since its opening the library has received donations from private persons of nearly 60,000 objects, consisting of books, pamphlets, maps, newspapers, &c., valued altogether at something less than £11,000. The total number of books at the end of 1874 was 83,231. The library is kept open to the public free of charge on week-days, from 10 a.m. to 10 p.m., and was visited in 1874 by 239,188 persons, or by about 10,000 more than in 1873.

The National Gallery is in the same building as the Melbourne Public Library. It contained at the end of 1874, 69 oil paintings, 158 statues and works of art, and 5,650 water-colour drawings, engravings,

photographs, &c. The general public are admitted without charge on week-days, between the hours of noon and 5 p.m. in summer, and noon and 4 p.m. in winter.

In connection with the National Gallery there is a school of painting, which was attended in 1874 by 3 male and 24 female students; and a school of design, which was attended in the same year by 54 male and 135 female students.

The Industrial and Technological Museum is in the same building, and is open to the public during the same hours as the National Gallery. It contained at the end of 1874, 182 books, pamphlets, maps, &c., 15,035 specimens, and 107 drawings. Class lectures delivered in 1874 on chemistry were attended by 22 students, on mining and mineralogy by 11 students, on mathematics by 2 students, and on telegraphy by 85 students, of whom 10 were females.

The National Museum is in a building attached to the Melbourne University. It is open to the public, without payment on week-days, from 10 a.m. to 5 p.m., and was visited by 100,514 persons in 1874, as against 89,491 in 1873. The cost of erecting the building was £8,475. The amount spent on maintenance in 1874 was £2,047, of which £712 was expended on purchases, &c., and £1,335 on salaries and wages.

The Supreme Court Library is supported by fees paid by barristers and attorneys on admission to practice at the Supreme Court, and is free to both branches of the legal profession between the hours of 9 to 12 on Saturdays, and 9 to 4 on other days. Besides the library in Melbourne, there are 9 branches in circuit towns. The total number of volumes at the end of 1874 was 11,365, and the amount expended from the commencement to that date was close upon £10,000.

Free libraries, atheneums, or mechanics' or literary institutes, exist in most of the towns of the colony. These institutions numbered 130 in 1874, and over a million visits were paid in that year to 68 of their number, which kept visitors' books. The number of volumes they possessed in 1874 was 174,103, of which over 13,000 were presented by private persons. The cost of the buildings was £90,280, the amount of aid received from Government from the commencement was £50,388, and the amount from private sources was £158,510.

A well-executed map (34 x 24) specially prepared, accompanies the work.

#### THE "VANGUARD."

AFTER a masterly inactivity of nearly two years (says the *Broad Arrow*) slightly interspersed with a movement or two in the direction of "how not to do it," the Admiralty have at length signed an agreement with a view to raising the "Vanguard." The agreement is signed by Admiral Hood and Lord Gifford on the part of the Admiralty, and Captain Coppin has formed a company to raise the requisite capital to carry out his plans, he himself being the director.

Captain Coppin, who is well known to everybody that has ever had anything to do with raising sunken ships, bases his confidence upon two inventions which he has worked out with the express object of raising the "Vanguard." It must be remembered that the ship is sunk at a depth of no less than twenty fathoms, and that the plating of her bottom is only five-eighths of an inch thick, which is very slight indeed compared with her enormous weight of 5,000 tons. Hence two very great difficulties which characterise the case have to be overcome. The divers have to get to the ship and be enabled to work there, and she has to be so slung that when lifted from the ground her bottom shall not be crushed. The former was the greater difficulty of the two, and to get over it Captain Coppin invented a diving-dress which would relieve the body of the diver from the greater part of the pressure due to the superincumbent body of water. The plan for slinging the vessel did not require the exercise of so much ingenuity, and Captain Coppin has satisfied himself that he has fully mastered that obstacle. He is having a large number of steel wire ropes manufactured, and he will gird the vessel with a sufficient number of these to reduce the strain on each rope and its pressure on the bottom plating to safe limits. Pontoons are being made on the Clyde capable of raising, collectively, a weight of 6,000 tons, and, when these are ready, active operations will be commenced at the scene of the wreck. Every precaution will be taken to prevent mishap when the day arrives for lifting. The strains upon the wire ropes will be equalised by an hydraulic arrangement; the pontoons will be kept from tipping or canting by filling some of the innumerable small cells into which they will be divided, with water—in short, the experience of a lifetime

\* "Notes on the Colony of Victoria: Historical, Geographical, Meteorological, and Statistical. By Henry H. Hayter, Government Statist," &c. Melbourne: Carron, Bird and Co. 1876.



spent in raising sunken ships will be brought to bear upon this task, which, if successful, will be the crowning feat of the whole.

If we ever had any doubts regarding the feasibility of Captain Coppin's plans, they related to the question of passing the wire ropes under the vessel's bottom. But those doubts are now removed, as it has been determined by actual examination at the ship that, instead of a bank of sand being heaped up against her, she is resting on a hard bottom, and is entirely free of the accumulation of sand which her presence has caused to be deposited. It is necessary that we should free our mind of the ideas regarding sand which we have formed with our shallow-water experience. At the depth where the "Vanguard" lies the pressure of water is fifty-four pounds to the square inch, or about equal to that of steam in a high-pressure boiler. Hence the sandy bottom is quite hard, and the additional pressure per square inch due to the weight of the vessel is not sufficient to cause any considerable depression in a substance already so compressed.

### THE NEW BUILDING SOCIETY.

On last evening a number of gentlemen interested in the formation of "The Dublin Mutual Benefit Building Society" met at 5 Foster-place. A resolution passed at a preliminary meeting on 1st June was rescinded, viz.:—"That, subject to 750 shares being subscribed for the Dublin Mutual Benefit Building Society, the Society be established, and that the necessary steps be taken to have the rules certified by Act of Parliament." It was now resolved to "start the society with the number of shares already subscribed for." The next meeting will be on the 7th inst., when (the chairman is of opinion) "they might be able to satisfy a good many as to the advantages of the society, and that they would not have to wait, as some imagined, for fifteen years for a loan. They would be able, he thought, to build better houses than were now built." We wish the society success.

### HOME AND FOREIGN NOTES.

**A RINK IN THE MARKET.**—By our advertising columns it will be perceived that the "Hammersmith Skating Rink" premises are for sale. A considerable sum of money was spent in the construction of the floors and buildings, which are of the most permanent character.

**ARCHÆOLOGICAL CONGRESS.**—As previously announced, the annual Congress of the British Archæological Association opens at Llangollen, on Monday, 27th inst. Excursions will be made by the members to places of interest in the district each day, and evening meetings will be held throughout the week. The Congress will close on Monday, 3rd prox.

The new offices of the National Discount Company in St. Andrew-street have been opened during the past month. The internal arrangements embrace most of the ordinary requirements of such a business, and the work appears to be creditably executed. The offices, boardroom, &c., have been designed and carried out under the superintendence of Mr. John Lanyon, of Belfast.

**THE LONDON BUILDING TRADE.**—As we go to press there is some talk of a threatened strike on the part of the masons, who have asked their employers for a half-hour less per day, and a penny an hour increase of wages. On the part of the masons, it is stated that many of them live a considerable distance from their work, have to come by train, are frequently late, and thus they lose quarter days (not if paid by the hour). The builders' labourers would be affected by the masons' strike, and they are taking steps to guard their interests.

**THE IMPROVEMENT OF THE PORT OF DUBLIN.**—Progress is observable on the north and south sides, but more particularly on the former, through the extension of the North Wall, and the building requirements necessitated by the railway and steam-packet companies. We recently, in our notice of the Port and Docks Board Report, instanced some of these improvements, and we will shortly return to the subject, and, perhaps, by way of retrospective review, show what has been achieved under the direction of Mr. Bindon B. Stoney, the able engineer of the Port and Docks Board.

**THE PROPOSED SCIENCE AND ART MUSEUM IN DUBLIN.**—At a meeting of the Corporation held

on the 16th ult., the Town Clerk read an abstract made by Mr. MacSheehy, law agent, on the provisions of the bill for the establishment of a Science and Art Museum and National Library in Dublin. After some discussion the resolution proposed at a meeting held at the Mansion House on the 17th of April, 1876, was approved and ratified, which was to the following effect:—"That it is indispensable to the success of such an Irish Department of Science and Art that it should be placed under the management of a board of Irish gentlemen in direct communication with the Government, and with such State supervision or control as may be desirable. That for the above reasons we object to so much of the bill before us as invests the existing Department of Science and Art with any authority, privileges, or right of interference with science and art in Ireland. That our thanks are eminently due to Mr. O'Shaughnessy, M.P., for the untiring zeal and ability he has displayed in his efforts to secure for our country a national Department of Science and Art; and that the Town Clerk be directed to forward copies of these resolutions to him, together with the vote of thanks, and that copies be also forwarded to the city members."

**BAD FOR THE GAS COMPANIES.**—Viewed in a sanitary aspect, the introduction of the electric candle appears to involve a marvelous change. At present it is difficult to say whether we suffer more from breathing coal gas itself or the gases which result from its combustion. In the perfect combustion of the purest coal gas we obtain carbonic acid, the presence of four per cent. of which in the atmosphere is highly injurious; but when, as too frequently happens, there is not perfect combustion, we have more or less of carbonic oxide produced—a gas which, according to Dr. Richardson, causes giddiness when present even in small proportions in the air. On the other hand, the only effect of the electric light on the atmosphere would be the production of ozone, one of the most mysterious bodies with which modern chemistry has attempted to deal. In large quantities it is said to act injuriously on the respiratory organs, but there are grounds for believing that its presence in small proportions in the air not only prevents infectious diseases, but is the chief cause of the difference between the air of the seaside and that of large towns. It may, therefore, be something more than a poet's dream to picture the time when citizens, instead of running down to the seaside for a supply of air charged with ozone, may entertain their inviolated country cousins with a whiff of something equal to the "briny."—*Mayfair.*

### TO CORRESPONDENTS.

**SPRINGER BARRY.**—It is stated that there is not a likeness of this accomplished actor in existence. Of Henry Mossop we believe there is more than one likeness, but copies are very rare.

**"DUBLIN ARCHITECTS."**—A correspondent's criticism is too indiscriminate. Like every other profession, there are good and bad specimens, and it is only too true that not a few prefer a London mint-mark in ushering their designs, rejected and unaccepted, to the notice of the public.

**E. S. (London).**—Your kind order for advertisements will be attended to upon receipt of a bank cheque for amount.

**ST. PATRICK'S.**—We have always been of opinion that the best method of forming a new route to St. Patrick's Cathedral was to open up York-row (now Whitefriar-place) and make a new street from thence, with a curve at Whitefriar-street, through the present Wood-street to Cannon-street. This and other city improvements spoken of will probably be carried out in the twentieth century.

**RECEIVED—C. E. (London)—R. Y. (Belfast)—A. M. (See this issue.)**—Assistant Surveyor (Nine candidates for the office have been examined, and their qualifications certified.)—**M. D.—F. B., &c.**

### NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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At PHIBSBOROUGH ROAD (Train Line).

Lease, 240 years.

For terms apply at the Office of the Dublin North City Milling Company (Limited), Phibsborough.

### BUILDING GROUND TO LET.—Build-

ing Ground, North Strand.—Important to Parties about to build under "Town Improvement Act"—Ground for upwards of 100 houses to be let where they are so much required; parties taking an entire block liberally dealt with; a lease will be granted for any term direct from the owner in fee. Apply to Mr. HUGH FITZGERALD, Fairview, Clontarf.

CLONTARF ESTATE, TOWNSHIP OF CLONTARF, COUNTY DUBLIN.

**SEVERAL** eligible BUILDING SITES for TERRACES and DETACHED VILLAS, TO BE LET, on the Estate of JOHN EDWARD VENABLES VERNON, Esq., D.L. They command fine views of the sea and mountains. These Lots will be Let on Leases for long terms of years. Tramway Cars run to and from town every quarter of an hour, and gas and water pipes have been laid down.

For particulars apply to

THOMAS C. FRANKS, ESQ.,  
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### C. W. HUGHES,

Show Case, Camera, Cabinet Manufacturer, AND GENERAL CONTRACTOR,

**BEGS** to notify to his Customers and Friends that, owing to increase of business, he has removed to more extensive premises, viz., 25 SYNGE-STREET, where, with the increased space and attention to business, he will be able to have all works entrusted to him done in the shortest possible time that first-class workmanship will permit of.

25 SYNGE-STREET,  
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### NORTHUMBERLAND SAW MILLS AND JOINERY WORKS.

TIMBER, SLATES, BRICKS, TILES, SEWER PIPES, HOME AND FOREIGN FLOORING, MOULDINGS, &c. SPRUCE, PINE, MAHOGANY, and other LEAVES, SCANTLINGS, and SLABS.

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BY THE LATE

**RICHARD R. BRASH, Architect, M.R.I.A., F.S.A. Scot.,**

FELLOW OF THE ROYAL HIST. AND ARCHL. ASSOC. IRELAND.

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THE IRISH BUILDER.

VOL. XIX.—No. 242.

PUBLIC WORKS IN IRELAND.\*

THIRD NOTICE (conclusion).

THE ecclesiastical structures in part described and illustrated in the present report of Mr. T. N. Deane are well known to the majority of our readers. They have already been ably described in the works of Petrie, Brash, Hill, and other native writers, architectural and antiquarian. Concerning their history and features, Mr. Deane has very little to tell in addition to what has been almost exhaustively told before. What is really new in his report is the account he furnishes of the works of reparation or protection which are being carried out under his supervision, including some architectural finds." At the risk of giving offence (although nothing is farther from our intention) we must again say that the explanatory drawings are for the most part wretchedly-executed wood-cuts, and several of them very bad copies, indeed, of Petrie and Brash, &c., as a reference to the works of both of these authors will show. Surely there are artists to be found in Ireland who could turn out better work with fair reduced or enlarged drawings of the originals before them. We shall not set before us the task of placing Mr. Deane's descriptions side by side with Petrie, Brash, and others; nor of quoting the worthy superintendent's words in detail. In our recent articles on the "Literature of Gothic Architecture in Ireland" we passed under review a large amount of material connected with the architectural features of our National Monuments and ecclesiastical structures, so a mere repetition now is quite unnecessary. As we proceed, however, some passages from Mr. Deane's report, or epitomised summaries thereof, may be necessary, to give the reader his opinions.

Speaking of the choir at Ardfert, near

Tralee, which has a grand arcade of nine arches on the southern side and three on the eastern end, the highest being 30 ft., Mr. Deane says:—"The detail of these windows is excellent, and shows that the designer had a thorough knowledge of early English work. I have frequently remarked in Ireland that although the main features of a style were followed with a certain accuracy, the mouldings exhibit what, if not due to difference of material, shows either a want of knowledge of the more delicate detail, or a carelessness in execution not usually met with in England. As usual, the stepped battlements have replaced the original eaves. The chantry and transept are late 15th century work, with good detail, but of little interest." We would hold that good detail was not a matter of little interest, for what is good in architecture, as in other things, ought to be matter of importance.

Of Tempul-na-Hue, or Hoe, as Mr. Deane puts it, the church is said to be of the same date as the western doorway of the cathedral, and "is remarkable for its beautiful and delicate detail and the markedly classical character of some of its mouldings." He thinks that the moulding on the western doorway is suggestive of the Greek echinus. There is, we think, a very slight resemblance indeed to the egg-and-anchor or egg-and-tongue, for the anchor or tongue is altogether absent in the Irish moulding, and the other features do not square with their supposed Greek prototype. The angle capitals and large angle shafts, with their moulded and corbelled eaves course, are considered by Mr. Deane "worthy of study, and recall the church of Kilmalchedar, near Dingle."

Of Tempul-na-Griffen we are told that it has but little interesting detail, and is much later than either the more ancient part of the cathedral or Tempul-na-Hue. The work of preservation in connection with the above churches mainly consisted in pointing the walls with cement, the removal of dangerous roots of trees, and grouting with concrete the upper portions of the walls. "The arcade of nine windows in the cathedral, as well as the eastern end required the greatest care; the former was in a ruinous condition, and it was found necessary to build a flying buttress against it to prevent its falling outwards. The arches into the transept have been reopened, the walls have been pinned with stone, and the ground of the interior of the buildings levelled as far as possible."

The works of preservation at Monasterboice, Co. Louth, where the ruins consist of a Round Tower, three stone crosses, and the remains of three churches, comprised the pointing of the walls with cement, which were in a precarious condition, and filling the larger interstices. The top of the Round Tower had long since fallen, and none of the original stones were found. One cross was broken into three pieces; this was put together and re-erected, and the other crosses being found in good condition, were left untouched. The superintendent says:—"The remains of the churches exhibit but little detail worthy of note, and are in so ruinous a condition that nothing further could be done than pointing and grouting the walls. The graveyard has been partially levelled, especially the spaces within the churches."

At Devenish Island, Lough Erne, where there are a number of interesting ruins, —church, oratory, round tower, stone crosses, and sculptured stones,—repairs have been

carried out as follow:—First re the ancient church—"Several stones have been reset, and some replaced on the piers of the tower; the base of the tower has been made good where defective; the top of the tower wall has been pointed, and the newel of the staircase repaired; the rent in the side wall of the choir has been made good; the rubbish has been cleared away from the interior of the church; the south wall of the choir has been levelled, and some of the loose stones and sod coping put thereon; the crosses and sculptured stones have been collected and placed in a convenient position; sods are being laid down in the church at the original floor level; some general pointing with cement to joints of loose stones has been done, and sod coping to protect the walls." The above works of protection are certainly not works of "Vandal restoration," and in doing them Mr. Deane appears to be keeping duly within his instructions, to do what was merely necessary for the preservation of the ruins. At the oratory of St. Molaise, the Round Tower, and other buildings alongside, similar repairs as those above detailed were also carried out.

In connection with the ruins at Glendalough, Mr. Deane continues his account of the work executed there. In clearing the rubbish on the site of St. Saviour's, "as anticipated, the accumulated rubbish concealed much architectural detail, and the excavations on the site of the priory exposed the complete outline of the building. On the southern side were found the arch and jamb stones of three windows, as well as those of the two entrances; and on the eastern side the complete details of a beautiful and curious window. This most interesting example of Romanesque work I look upon as unique in detail. The ope is divided on the inside into two sub-arches separated by a mullion, the tympanum and two arched heads being in one stone. There is no abacus or capital, and the splay of the lights following that on the inner splay is a peculiarity which I have not observed elsewhere. I have had it replaced in its original position, as to which there could be neither speculation nor doubt. At the northern side the church expanded into what appears to have been the domestic portion of the building, apparently of the same date as the rest of the priory. In the eastern wall was found a flight of steps which evidently led to the croft over the chancel. On the northern side were discovered the stonework of two other windows."

The architectural "finds" mentioned by Mr. Deane, and which were unearthed during the reparations, form the most interesting portion of the report under notice. In the work of repair the chancel arch has been re-erected, nearly all the stones are reported to have been found amongst the rubbish, and those which were missing were replaced by uncarved voussoirs. The arch presents, in the superintendent's opinion, the most beautiful carved examples of its kind in Ireland. It is to be regretted that the woodcuts do not give a fair reflex of the originals, and that they fall so far below the copies in the works of the authors we have already mentioned:—"Some of the detail of the mouldings is peculiar, and would almost lead one to place the date of the work later than the 12th century, whereas other detail is decidedly very early. The walls have been pointed with concrete, the fences made good, and the

\* "The Forty-Fifth Report from the Commissioners of Public Works in Ireland," &c. Dublin: Alexander Thom. 1877.



interior laid in grass." The state of the Cathedral, and what turned up during the work of reparation are thus described:—"The condition of this building was much the same as that of the others. Piles of ruined masonry and gravestones, ancient and modern, lay about on all sides: tangled woods and brushwood overgrew the walls. The masonry exhibits work of three distinct periods; the lower portion of the walls is of a very early date; the upper being rebuilt from the *débris* of more ancient work, the frustra of shafts being used in places; the latest portion being 12th and 13th century work, the mouldings Romanesque and early English, and all of Caen stone. On the north the jambs and bases of a fine doorway were found, and, beneath where the chancel arch stood, most of the arch stones. As many of these as would indicate the form of the arch have been reset upon the impost caps. The eastern window has been partially restored; those on the south side have been opened. The walls have been grouted with concrete, and the interior levelled as far as was consistent with respect to graves."

Concerning "The Priest's House," we are told, this curious little oratory excited the interest of the "antiquarian Borenger" and others by whom its details were carefully drawn in 1779. The artist Beranger was scarcely an antiquary, though he imbibed a love for Irish antiquities in his sketching tours; but we are certainly indebted to him for the service he rendered by his faithful drawings, at a time when artists of his stamp were rare, and when many of our National Monuments were to be seen that will be seen no more in their embodiment as he depicted them. The "Priest's House," a little oratory, had fallen into a sad state of dilapidation. The excavations of the surrounding ground brought sufficient stones to light of the eastern and southern entrance to enable the structure to be put in the same condition as it was nigh a century ago. "The carved tympanum, which had been removed, was given back and replaced in its original position, and the stonework generally has been secured with concrete." A wretched engraving is given of this tympanum, but it is in company with others of a like class of execution.

At this point we would again refer the reader to drawings in Petrie and Brash's works of the ornamental details at Glendalough which are worthy of scrutiny. Speaking of St. Saviour's, which he described in detail, Brash wrote:—"I think it will be admitted that the ornamental portion of this little edifice was not indebted either to Normandy or England for its inspiration, but was derived from native sources."

Respecting the Round Tower Mr. Deane says:—"This building was on the verge of ruin, the mortar quite washed out of the walls; the conical top had long since fallen amongst the *débris* round the base and inside the tower; all the shaped stones of the cone were discovered, and the apex in the cathedral. These have been replaced and the walls carefully pointed in cement." St. Kevin's House, which has often been described, has been re-pointed with cement concrete, and the loose stones re-set in the roof and cone of the diminutive tower attached. An iron gate has been put to the eastern opening, and the interior has been made the receptacle for various objects of interest found amongst the ruins around.

Attention is directed by Mr. Deane "to the beautiful cross of which I annex an illustration; it was found in fragments in different places; these have now been put together and erected within the oratory." The cross, as illustrated, is another vile specimen of an engraving. Possibly it is in a very shattered condition, but certainly a photograph would tell a different tale of its appearance than the scratchy engraving that is given in the Report.

"To the south-east of St. Kevin's House has been discovered what I presume to be St. Kieran's Church. The outline of the walls, with the chancel and altar, are perfect. The surrounding ground has been levelled, and put in decent order." Of Our Lady's Church all we are told is that it is "probably the oldest structure in the valley, has little of interest beyond its doorway, which presents all the characteristic features of early work, being narrower at the head than at the base, and formed of massive stones. The nave has been cleared out and the walls secured from further ruin; little or no architectural detail was found in the excavations."

*Re St. Kevin's Kitchen or House*, Bell, in his Treatise on the Gothic Architecture of Ireland, published in 1828-9, wrote that this little edifice, with its tower and stone roof, "is in good repair, and for the last ten years has been enclosed, and is now (1820) used as a Catholic place of worship. Now again, however (1827), this edifice is forsaken; the temporary door has been torn away, the altar has been overthrown, and the winds of the desert [the valley] once more howl with resistless fury through the dismantled windows."

At Reefert Church, as Mr. Deane writes it—said to be so named from being the burial place of kings,—many stones and crosses were discovered, amongst others one flat stone with an inscribed cross and inscription. The shaft and base of this cross (which is illustrated in Petrie and other works) was discovered. The cross has been re-erected, and the chancel arch and east window restored, all the stones having been found amongst the *débris*. The interior has been cleared of its rubbish, and laid down in grass, the surrounding fence repaired, and the approaches gravelled.

The last building treated of in the Report is that of Tempull-na-Skellig. This church stands on a cliff over the lake, and is generally approached by a boat. It is simply the remains of a small oratory. The *débris* which fell from the mountain-side was removed, and a window, said to be similar in design to the east window in St. Saviour's, discovered. Here also some ancient steps or causeway leading from the lake to the church were also laid bare.

We have now given all that is material in Mr. Deane's Report, and nearly in his own words; and if we had to find fault in some particulars, it was done with a restraining hand. The work which the superintendent of National Monuments is engaged upon has our heartiest sympathy, and we have no reason to doubt but he is doing his best. We would like to see the sphere of his operations enlarged, and many more of our ecclesiastical edifices and monuments, Pagan and Christian, passing under his hand, so long as simple preservation, and not Vandal restoration, is carried out conscientiously. In future reports, however, we would like to see Mr. Deane careful as to his authorities and as to

names and dates. It is his province, if he so wills, to indulge in conjecture, for the age of buildings can in many cases be only fixed by a comparison with styles practised elsewhere. We trust also that he will furnish the public, professional and general, in his next annual report with better-executed illustrations than those he has given of our National Monuments.

#### THE CAXTON CELEBRATION.

THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

*Fourth* FIFTH PART.

IN 1760, and some years later, Edward Exshaw carried on the printing, publishing, and bookselling business at the "Bible," Dame-street; and in 1782, and for several years subsequent, John Exshaw, the last and most remarkable and representative member of the family, carried on the business at 98 Grafton-street. John Exshaw did a large amount of business in his line in the printing and publishing way, and for many years was a conspicuous member of the Corporation. In the year 1782 he was elected to the aldermanic gown, and shortly afterwards he figures in our directories as "alderman, coroner, and bookseller." In 1790 he became lord mayor, and in the same year he contested the city of Dublin in the Irish Parliament unsuccessfully. During the disturbances of 1797 and 1798 he took an active part on the side of "law and order," commanding the Stephen's-green yeomanry—a battalion of upwards of 1,000 strong. Exshaw was likewise adjutant-general of the entire yeomanry forces of the Dublin district, and, as an obituary notice at his death says, "was considered an excellent officer, reversing the adage, *cedant arma toga*." On one occasion during these disturbances the whole command of the Dublin garrison devolved upon Exshaw, in consequence of the absence of the troops of the line. Previous to his death he was one of the police magistrates of the second division, the senior alderman, and the oldest magistrate in the County of Dublin. John Exshaw died at his seat at Roebuck on the 6th of January, 1827, at the age of 76. He was for many years the publisher of the *Hue and Cry*, the emoluments of which in his hands were stated to be about £1,000 a-year. He also issued for some years the *English Registry*, uniform in shape with Wilson's *Citizen's and Gentleman's Almanack* and Wilson's *Dublin Directory*, with which works it was usually bound. From the brief outline we have given of John Exshaw's career it may be seen he was a somewhat remarkable representative of the printing and publishing trade in Ireland.

James Hoey, whose name we have already mentioned as being a partner with Faulkener, carried on the printing and bookselling business for several years in Skinner's-row, after the dissolution of the partnership, the old shop faced the Tholsel building. Hoey appears to have done a pretty fair share of business for several years, but nothing approaching to that of his early partner, Faulkener. Later in the century, however, his son, James Hoey, became a noted bookseller and publisher at the sign of the "Mercury," Parliament-street, near Essex-gate, west side. James Hoey, the younger, like his father, and his father's partner, was associated for several years with journalism in this city, having been the publisher of a newspaper of some note, the *Mercury*. Hoey's newspaper, although he himself was a Catholic, became the organ of the Irish Government during the viceroyalty of the Lord Townsend, 1767-1772. In the newspapers for these years were published all the Government notices and proclamations.

Mr. Gilbert in his "History of Dublin," brings together several interesting memoirs connected with Hoey's paper, its contributors, and the controversies the writings therein excited. The *Mercury* was published



thrice a week, and among its principal contributors, for some years, were Richard Marley, Dean of Ferns; Robert Jephson, the dramatist and wit; Rev. Mr. Simcox, appointed in 1772 Rector of Fecullen; Captain John Courtenay, subsequently a commissioner of the English Treasury; and Denis, one of the chaplains of Lord Townsend.

An extract here from Mr. Gilbert's volume will be to the purpose:—"A series of well-written papers, entitled the 'Bachelor,' signed 'Jeffrey Wagstaffe,' appeared in the *Mercury*, which discharged perpetual volleys of satires and epigrams against Dr. Charles Lucas and the 'Committee for conducting the Free Press,' as the editors of the *Freeman's Journal* styled themselves. The latter, irritated at being called the 'Puritan Committee,' declared that the writers in the *Mercury* were a knot of Jesuits, employed by Hoey, a popish printer, to subvert the State, and added that his sign of Hermes, the flying thief, correctly typified the principles of the paper. The contest was maintained with much wit and talent on both sides. Faulkener and Howard fell victims to the ridicule of Jephson; and the *Mercury* incurred the censure of Wesley while in Dublin, for having published a letter in 1767, reflecting upon the love-feasts of the Methodists, in which the latter were styled 'sanctified devils, cursed gospel gossips, scoundrels and canting hypocritical villains.' Hoey, who continued to reside in Parliament-street for many years after the departure of Lord Townsend, died in 1782. In 1792 his daughter, Elizabeth Hoey, one of the greatest beauties of her day, was married at Bordeaux to Charles Talbot Earl of Shrewsbury, her sister became the wife of an eminent merchant named Gnestier, and their son represented Bordeaux in the Chamber of Deputies."

Several of the productions which appeared in the columns of Hoey's *Mercury* appear to have been afterwards re-published separately. A literary war was carried on for some time between the contributors of the *Mercury* and Faulkener's *Dublin Journal*. Mr. Gilbert says:—"A continuous fire of epigrams from the columns of Hoey's *Mercury* widened the breach between Faulkener and Howard, both of whom, to their great consternation, were suddenly in 1771 made the laughing-stock of the entire town by the publication in the *Mercury* of a satire in prose and verse entitled 'An Epistle to Gorges Edmond Howard, Esq.; with Notes Explanatory, Critical, and Historical. By George Faulkener, Esq., Alderman.' Robert Jephson, the principal author of this production, dined with a large party at Faulkener's house on the day before the appearance of his 'Epistle,' and found himself in an awkward position when the host, rising, informed his guests of the intended publication, and called upon them to drink to the health of the author." The same authority adds that this piece passed through nine editions, and was considered one of the most witty satires ever published in Ireland. In this "Epistle" Faulkener's style is closely parodied, and an ironical description given of the printer, bookseller, and author of the *Dublin Journal*.

The Charles Talbot above mentioned as the husband of Elizabeth Hoey was the fifteenth Earl of Shrewsbury in England and Wexford and Waterford. His lordship was born in 1753. What is noteworthy of his marriage with Elizabeth Hoey, was the fact of her being on her way to Bordeaux to take the veil, when she was met by his lordship. This Dublin beauty was the eldest daughter of our Dublin printer, but the marriage resulted in no issue; the earl died at his house in Stanhope-street, London, on the 6th of April, 1827, possessed of nearly half a million of money, independent of landed and other property. In tastes the earl was much given to music and mechanics.

The bookselling business was carried on for many years after James Hoey's death by his wife Jane Hoey at 19 Parliament-street, but was dropped in name as far as that branch of the family is concerned a few years before the close of the last century. Of

Peter Hoey, bookseller and publisher at 1 Skinner's-row, and afterwards for several years in the present century at Upper Ormond-quay, we will have something to say hereafter.

Returning back for some years we find Samuel Powell, the noted Dublin typographer, of whom we have already given some particulars, as the printer of the first original critical and literary periodical issued in Ireland. This novelty in literature was started in 1744 by the Rev. Jean Pierre Droz, a clergyman of the Reformed Church of France. Before the publication of Mr. Gilbert's "History of Dublin" there was not much to be found in a connected form about Droz's life or literary enterprises, save what could be unearthed from his publications, and a short notice of him in the *Anthologia Hibernica* in 1793. From both sources we are able here to supply some interesting facts. Droz's work was issued with the title "A Literary Journal: October, November, and December, 1774. Dublin: Printed by S. Powell for the Author. 1774." Four numbers were published every year, so it was a quarterly journal, containing a review or literary history of the three months preceding. Considered for the time, it was a very creditable work, for the author endeavoured to furnish his readers with a list of all books of note published abroad, and of doings at the seats of learning in "Muscovy, Sweden, Denmark, Germany, Holland, Switzerland, France." The editor's accounts of contemporary continental literature under the heading "Literary News" were ample, the essays were chiefly theological and scientific, but the literature of Ireland found but small notice at the hands of the editor, although one of his correspondents drew his attention to this deficiency. In the whole work, from 1744 to the last number in 1749, there are but three papers on Irish subjects. Droz kept a book shop first in College-green, and imported a considerable quantity of foreign books. In 1749 he removed to Dame-street, and, as the advertisements said, "next door to the sign of the 'Olive Tree,' and exactly opposite to George's-lane" (now South Great George's-street). A series of French comedies and several works written by French refugees in Ireland were issued by him; he also edited Broughton's "Dictionary of Religions." He appears to have been a very active and energetic person, for on Sundays he officiated as clergyman at the French Church of St. Patrick.

After the death of Droz in December, 1751, an attempt was made by a countryman of his, the Rev. M. Des Vœux, to revive the periodical under the title of the *Compendious Library or Literary Journal Revived*. Of Des Vœux we will quote the particulars given in Mr. Gilbert's volumes:—"Antoine Vinchon de Bacquencourt, who assumed the surname of Des Vœux, was the second son of De Bacquencourt, President of the Parliament of Rouen. He was an ardent opponent of the Jansenists; and amongst his writings were—'Défense de la religion réformée, ou réfutation d'un livre intitulé; la vérité de la religion Catholique prouvée par l'Ecriture Sainte, par M. Mahis, Chanoine de l'église d'Orléans, ci-devant Ministre de la Religion réformée,' 4 volumes, 32mo, Amsterdam, 1735; and 'Lettres sur les Miracles,' 12mo, Rotterdam, 1735. Having by his religion incurred the displeasure of his family, he migrated to Ireland, was appointed chaplain to Lord Sackville's regiment, and subsequently became minister of the French congregation at Portarlington, the ancient territory of the tribe of Un Dimassigh or O'Dempsey, which, after the Treaty of Limerick, had been planted with Dutch and foreign settlers by Baron Ravigny, whom William III. created Earl of Galway." Among other works Des Vœux published a "Philosophical Essay on Ecclesiastes," 4to, London, 1760; and a translation of La Bletterie's "Life of Julian." Most likely Mr. Gilbert is correct in the date of Droz's death, but the writer in the *Anthologia* puts it down in 1753.

It may be interesting to state further, on

the authority of Mr. Gilbert, that "De Vœux's son Charles amassed a considerable fortune in India, obtained a seat in the Irish Parliament on his return to this country, and in 1787 was created a Baronet of Indeville, in the Queen's County. He was father of Sir Charles Des Vœux, who served under the Duke of York in 1799, lost his leg at Alkmaar, subsequently became a member of council at Madriff, and on his death in September, 1858, was succeeded in the baronetcy by his son Captain Sir William Des Vœux." What an expanding and instructive little literary and military history hinges to the uprise of the first literary periodical in Ireland, its author, and his successors!

The writer in the *Anthologia*, mentions another literary French clergyman of the name of Virasel, who settled in this country, and in 1750 printed his "Philander and Asposia," a poem. This clerical author was presented to the living of Enniskillen, which he afterwards exchanged for that of Dromore. *En passant* we may remark here that in the old Dublin directories of the last century, the names of several merchants and traders will be found, the descendants of the Huguenot settlers in Dublin and Portarlington. In the printing, bookselling, and publishing line, one of the last and most noted of these was Richard Edward Mercier, of Anglesea-street; but we have not yet arrived at his time.

In 1705, in Dame-street, opposite the "Royal Coat," lived Aaron Crossly, a herald painter and undertaker, who was the compiler of the first Irish peerage published. This work appeared in 1725, in a folio volume, under the title, "The Peerage of Ireland, or an exact catalogue of the present nobility, both lords spiritual and temporal, with an historical and genealogical account of them, containing the descents, creations, and most remarkable actions of them, their ancestors, &c." This work extends to 260 pages, and to it was appended a treatise on the "Significations of Things that are borne in Heraldry." "This book," says Mr. Gilbert, "notwithstanding its great defects, is highly creditable to the herald painter, especially as William Hawkins, the Ulster King at Arms, threw many obstacles in the compiler's way. In 1703 Hawkins insisted on an alteration in the coat of arms painted by Crossly on the coach of William Palliser, Archbishop of Cashel; and perpetual disputes arose between the rival heralds, although Crossly, in 1720, assured his friend Robert Dale, of the London College of Arms, that he did not value the Ulster King 'any more than the ground he trod upon.'"

Was the above William Hawkins the Sir William of the same name, who was the Ulster King at Arms during the era of the Irish Parliament, or were there two William Hawkins in succession in the same office? The dates given above suggest the query, for if the Hawkins of 1703 was the Hawkins of 1786, or later, he must indeed have been an old Ulster King when he died.

John Butler, who appears among the names of booksellers and publishers on Cork-hill in 1751, was the printer of the first general work on architecture of its kind, we think, in Ireland. The author of the work was John Aheron, an Irish architect. The manuscript of this work is at present in the British Museum, and for many years it was supposed that the work was never printed, so rare are the printed copies, until the present writer made the fact known. This work is entitled "A general Treatise on Architecture, divided into Five Books." Its original consists in 176 folio pages with this epigraph: "This book was written and drawn in pen and ink, and finished by the 13th of April, 1751, by John Aheron." The printed copy bears date "Dublin: Printed for the author by John Butler, on Cork-hill, MDCCLIV." The book, which is a good-sized volume, is well arranged, well printed, and illustrated with 140 plates well engraved, and all drawn by the author himself. It has a long list of subscribers' names, comprising several of the most celebrated public men of the day—



lords, earls, prelates, knights, public officers, Irish and English, holding appointments under the Government in Ireland, ladies of title, architects, and several building operatives. There are several members of the universities, including Oxford, and some authors who then and afterwards were known to fame—Philip Dormer Stanhope, Lord Lieutenant of Ireland, known as Lord Chesterfield; the Earl of Mornington (of the Duke of Wellington's family); Dr. George Stone, Primate of Ireland; Richard Boyes, Earl of Cork and Burlington; Henry Howard, Earl of Carlisle; the Earl of Abercorn; Dr. Delany, and Dr. Dunkin, friends of Dean Swift's, and numerous others. The list goes to prove that the Irish architect and author was well known and patronised. In his preface the author acknowledges his indebtedness to the Earl of Burlington, who, it is said, perused the work before it was put to press, and gave it his entire approbation. Aheron laments the sudden death of his patron while the plates were under the hands of the engravers.

Now, as Aheron's book can compare favourably with the best of the books of a kindred nature published in London for half a century later, and as it is superior to many of them, we will give a short epitome of the matter of the volume. The first book is devoted to arithmetic, geometry, trigonometry, in view of the practice of both civil and military architecture. The second book treats of architecture in general, with many useful tables for charges and estimates, and also in relation to materials. The third book contains "A Parallel of Architecture," or a collection from ten of the principal authors who have written especially of the Orders. The fourth book contains several designs for doors, windows, chimney pieces, piers, gates, entrances, temples, pavilions, &c.; and the fifth and last book contains a great variety of plans and elevations for parsonages, farmhouses, manufactories, charter schools, country parish churches, and even palaces; also a number of designs for gentlemen's houses at a cost ranging from £500 to the large sum of £100,000. The treatise is supplemented at the end by a useful "Builder's Dictionary" of technical terms. Aheron spares no pains throughout his book to make himself understood, and to give the best specimens of the Orders from the works of Palladio, Scamozzi, Serlio, Vignola, Alberti, Viola, Perrault, Le Clerc, and others. He also enters into a criticism of their respective merits, suggests improvements in the arrangement of the columns, and differs in some respects from the canons laid down by the above authors. Some of the designs in his volume are those of works which were carried out by him in this country. Among them is Stradbally Hall (or House), Queen's County, Ireland, built for Pole Cosby. There are also a plan, elevation, and section of a house designed for a Mr. James Cotter, Rockforest, Co. Cork. There are living representatives in name of the above patrons of Aheron in County Cork and Queen's County. We are unable to glean any personal particulars of the life of the architect, the date of his birth or death, and, save in his own volume, we do not remember coming across his name in any work published in Dublin during the last century. He was a contemporary of George Semple, and must have been alive when that architect was re-building Essex Bridge, yet there is no allusion to Aheron in "Building in Water," though its author laid several foreign works on architecture under tribute in that volume. Aheron's volume, it is needless to say, is now very rare, and so also is Semple's, published likewise in Dublin upwards of twenty years later; but of that and other architectural works, and their authors, publishers, and printers, more hereafter.

**SANITARY CONGRESS.**—The Mayor and Corporation of Leamington have invited the Sanitary Institute to hold its congress in their town, and the invitation has been accepted. The congress will meet early in October.

### NEW CONVENT CHAPEL, BANTRY.

THIS chapel is to be built in connection with the Convent of Mercy, Bantry. It will have a beautiful position on the hill overlooking the town of Bantry. The exterior will be executed in red sandstone, with limestone dressings, to harmonise with the present convent, built some twenty years since. It is intended, when funds admit, to erect a handsome campanile, which would be a very conspicuous object seen from the bay. The design as to style has been made to suit the present building.

The internal arrangements are very satisfactory. The Nuns' choir opens into the chancel by three arches supported by coupled columns of Cork red marble. At the side of choir is the sacristy,—a recess for a side altar is formed facing the choir. There will be a very convenient passage from choir to organ gallery (which is at west end of chapel), so that the nuns can get to the turret stairs, without passing into the body of the church. The roof will be very effective, that over chancel will be boarded to a different form, and its panels will at some future time be decorated. The north and south windows are of two lights coupled, with shafts between, and circular light in head.

The works will be commenced shortly. Mr. Samuel F. Hynes, 30 South Mall, Cork, is the architect.

### ARCHÆOLOGICAL SOCIETIES' EXCURSIONS.

SOME of the central and provincial archæological societies in the sister kingdom have been active during the last few days. The members of the Royal Archæological Institute have been visiting a number of interesting churches, and the ruins and sites of ancient castles in West Herefordshire; and at their evening meetings a number of very interesting papers were read.

The Surrey Archæological Society's annual excursion took place on the 30th ult., when places of interest were visited in that county, under the presidency of Mr. J. R. Tyssen, F.S.A.

The Cambrian Archæological Society, under the presidency of Lord Clarence Paget, concluded its annual session on Friday last by an excursion to Llanberis, Dalbadarn, and other spots of interest to antiquaries and archæologists. The next annual meeting will be held at some centre in Wales.

The British Archæological Association's congress opens at Llangollen on Monday, 27th inst.

Why have we not an Irish annual excursion—an influential one—on the part of the leading architects, archæologists, and antiquaries?

### THE IRISH BOARD OF PUBLIC WORKS INQUIRY.

THE forthcoming Government Inquiry into the administration and constitution of the Irish Board of Works, which is to be conducted in Dublin, in autumn, will doubtless result in some reforms. While we have been long conscious that an improvement was needed and called for in the administration of the Irish Board, we never allowed ourselves to exceed the limits of legitimate criticism, by making an indiscriminate attack on its officials, and condemning the Board *in globo*. The Board, even as at present constituted and its duties administered, affords facilities which are not availed of to half the extent which they might be, by those whose interest it would be commercially, not even speaking of their

moral obligations, to carry out works of drainage, &c., on their land, and in providing dwellings for the tenant farmers and labourers located thereon. The scope of the operations of the Board of Works is wide, as may be seen in our articles "Public Works in Ireland." A more efficient administration is certainly needed, and this can only come through a change in the constitution of the Board, and a re-organisation of the offices and appointments in connection. It is not our intention to prejudice the forthcoming inquiry, though before it takes place we may find an opportune moment for making a few suggestions for the better organisation of the Irish Board of Works of the future.

### THE DUBLIN SOUTH CITY MARKET PROJECT.

WE scarcely know rightly what to say, and to say it well, about the progression that signalises this scheme, now a considerable time before the public. The directors' report, read at the first general meeting of the company, held on the 9th inst., is a somewhat curiously-worded document, as it is given in the daily papers:—

"The directors report that the special Act of Parliament under which the company is incorporated (39 and 40 Vic., c. 232), became law on the 11th of August, 1876, and this meeting is held in conformity with its provisions, which require that the first general meeting of the shareholders shall be held within twelve months of the passing of the Act. By the terms of the Act, the Corporation of Dublin were empowered to purchase the undertaking, but as they allowed the prescribed period to elapse without exercising this power, the prospectus detailing the objects of the promoters was issued to the public early in March of this year. Towards the middle of May following the capital (£200,000) was subscribed for, and all the shares (20,000) being then allotted, the company was formed. The cost of obtaining the Act and forming the company has been moderate. The whole outlay for Parliamentary, engineering, and local costs, as well as for brokerage, valuers' fees, and all other expenses in connection with the formation of the company, has been about £7,000, or 3½ per cent. on the capital. The necessary plans, schedules, and estimates relating to that portion of the land on which the market buildings are to be erected have been deposited with the Board of Works, and Mr. Joseph Fishbourne, of Carlow, has been appointed to arbitrate between the company and the various persons interested in the property to be purchased. Plans and schedules connected with the other portion of the undertaking are in course of preparation, and will be lodged with the Board of Works without delay. After some negotiations, arrangements have been made with the Corporation, and with the trustees of Simpson's Hospital, for the purchase of their interests in the site which the company is authorised to acquire. Negotiations are also in progress with some other owners, with whom the directors expect to make terms without the intervention of the arbitrator. It is the intention of the directors to obtain plans for the proposed market buildings as soon as possible, and to commence with that portion of the undertaking as soon as they get possession of the ground. In accordance with the Act of Parliament, all the directors now retire. Messrs. Marcus Goodbody, J.P.; Thomas Dockrell, Thomas K. Austin, and William M'Comas being eligible, offer themselves for re-election, and it is recommended that Messrs. Thomas Pim and Joseph Todhunter Pim (of Pim, Brothers, and Company), be elected members of the board, in place of Messrs. Maurice Brooks, M.P., and Thomas Pim, jun., who do not offer themselves for re-election."

We hope we may be able to echo the chairman's words—"When the works contemplated were carried out, it would form one of the greatest improvements in the city for a considerable time." There is no doubt that such a market as that contemplated is a great want, and another on the north side of the city is an equal want. We hope the directors will not be too anxious about dividends and remuneration, while improving their property. Shareholders, on the other hand, in these days, are more concerned about commercial principles than philanthropic ones. They like praise, to be sure, but they prefer the hard coin or both together.



LECTURES ON ARCHITECTURE.\*

(Continued from page 235.)

TOWN ARCHITECTURE AND MODERN PROBLEMS.

WE have traced, on former occasions, the various stages of development in the domestic architecture of this country, and have glanced rapidly at the changes which gradually transformed the hall of the Saxon Thane into the Mediaeval manor-house of the fifteenth century. From that period, the differences which ensued were differences of degree rather than of kind, and we find in the Elizabethan and Jacobean mansions arrangements which are, more or less, in accordance with the requirements of our own day. I may return hereafter to this part of my subject, but for the present I pass it by, in order to consider some matters of more general interest, affecting the transition from Mediaevalism to modern life, and the problems with which the architect is consequently brought face to face, in the application of his art.

In London, as we have seen, old things have almost entirely passed away, and we have to deal with new conditions. The Great Fire destroyed the picturesque, but inconvenient, dwellings of Old London, and gave an opportunity for improvement, such as has seldom occurred in the history of a great city. We in this generation are not, happily, likely to have a similar chance; but great changes are nevertheless taking place amongst us, and we may usefully consider our principles of action in the architectural treatment of great cities, as well as the important laws which should govern such action, by subordinating our arrangements to the ascertained truths of economical and sanitary science.

We often hear laments on the extinction of good taste. All, we are told, is common and vulgar, and we are daily plunging into lower depths of artistic bathos. Railways and kindred inventions, which have done so much to increase the power of man over matter, are complained of as the executioners of art; and, in the opinion of some, all that we have to do is to seclude ourselves from such base associations, and draw gracefully around us the garment of refined exclusiveness, before we bid a final farewell to a vulgar and pushing world.

This spirit is not uncommon: it finds vent sometimes in laments over all that has made our country great among the nations of the world, sometimes in pensive regrets over the colour of a fabric or the pattern of a coal-scuttle. It may, however, be doubted how far such despondency is to be justified by facts; and, still more, how far it is likely to be profitable for improvement in art. We may start by agreeing that ugliness is common enough, without conceding that it must so increase as ultimately to overwhelm us.

Good taste, if not common among ourselves, has ever been the heritage of the few. Is there less of it at the present time? or is it the fact that the many have come more to the front, and that their acquirements have thus acquired a special prominence? We are not able to assume that, even among the Greeks, good taste was common. The buildings which are left to us are precisely those on which we should expect to find that every resource of art had been lavished. Of daily life in ancient Greece we know little, and we cannot assume that it differed greatly from what our own would be under similar circumstances. Different times and circumstances lead to different manners, and the problems we have to solve in this anxious and brain-busy nineteenth century differ as greatly from those which presented themselves in the morning of the world's history, as do the grave pursuits of a modern philosopher from the happy and graceful gambols of a child amongst her flowers.

Modern civilization may sometimes seem to repress individuality, and its progress to resemble the march of an army, treading steadily, with a common step. But this is

not the whole truth. If it be true that it is rarely given to one mind to strike out novelty of a striking nature, and conquer by the flash of genius, it may be remembered that our army of progress resembles a column which never retreats, and in which each backward rank treads in turn in the footsteps of the more progressive pioneers.

I may here quote an opinion on this point, of a great man, not long passed away from among us, as far as his bodily presence is concerned, but whose name will never be forgotten wherever the English language is spoken,—I mean Lord Macaulay,—the history of whose life has lately been brought before us, with rare felicity, so as to cause us to add to our previous admiration of the historian and statesman a warmer feeling towards the man.

Lord Macaulay asks, "What is meant by the complaint that there is no individuality now? Genius takes its course, as it always did. Bolder invention was never known in science than in our time. The steamship, the steam-carriage, the electric telegraph, the gaslights, the new military engines, are instances." All these things "indicate rather a restless impatience of the beaten paths, than a stupid determination to plod on in those paths. So great is the taste for oddity, that some who have no recommendation but oddity hold a high place in vulgar estimation."

Now, if it be true that we have fallen on an age of great scientific progress, it will not do for the architect to ignore hard facts, and to be for ever yearning for an impossible resuscitation of the past. In the imitative art of painting, the artist may ignore the present if he will; he may people his canvasses with gods and goddesses; he may breathe the air of Arcadia or Elysium, and only return occasionally to the base sub-lunary ideas of modern life, when he needs to find a patron, or to examine his banker's book. To an architect such pure abstractions are impossible. He must be of his own time, and has no claim to existence unless he ministers to its requirements. Men do not build in order to look at their work, but to use it. Happy is he who can combine beauty and grace with perfect fitness, for he is the true architect, and in him art and science have met together.

Students of art who intend to become practical architects should bear this well in mind, and should not allow themselves to be unduly discouraged by the gloomy prophecies of failure, in which too many indulge with a facility which they almost appear to think stamps them at once as authorities. The past is ransacked, and its styles of architecture are paraded before us. What, we are asked, is your style? Why do you not give us something new? The question to some extent answers itself. Men worked on formerly in ignorance of the progress of others. Now, originality is hindered by the affluence of knowledge. The results of long and painful experience are secured with one grasp, and our historical knowledge is the main hindrance to possessing a style of our own.

Originality in architecture is not only limited by such considerations as I have endeavoured to explain in a previous lecture, but it is also now, as it has ever been, the divine attribute of genius. Architecture, as an "art of utility," cannot depend on the rare and uncertain appearance of original genius, however gladly she will ever welcome its advent. She has to take note of the accumulated knowledge of centuries, to strive after beauty while insisting on utility, and to guide her proceedings always with common sense. Unfortunately for architecture it is an art which cannot be indulged in without a more or less considerable expenditure, and with the increasing price of modern labour, it must, in the highest forms, be out of reach of the multitude. And bear in mind that the great principle of modern social progress is care for the multitude; and their interests are now rightly placed everywhere in the foreground. There may be, and no doubt

will be, as fine works of architecture hereafter as have ever existed in the past, but they may be obscured by the vast numbers of lesser things which are brought into existence to supply the wants of the masses.

We often lament, and, unfortunately, with good cause, that whereas the workman of old took a pride in his work, and showed an individuality in it, we look too often in vain for the evidence of such principles in modern work. Some ascribe this result to the introduction of machinery, but this is probably to confuse cause with effect. It is the *demand for labour* which has raised its value, and has brought upon us the necessity for economising it, as far as possible, by machinery and labour-saving inventions. The world has obeyed the Divine command to increase and multiply, and the question has thus been raised,—Is half the population to be without shelter, in order that labour may be lavished on the remainder? Modern civilisation gives a clear answer to this question, and the architect, as the servant of the latter, must strive to bring his art within the scope of her behests.

We have seen that in Mediaeval times the hewers of wood and the drawers of water were housed in the roughest manner, and this was also the case with the common people and the slaves in Rome and Greece. We have too much reason to be dissatisfied ourselves on this point, but much is now doing to remove the reproach, and there is consolation in the thought that when evils are admitted by the public voice, their cure or mitigation, in this country, is seldom far distant. When this has been done; when our people have become well lodged; when education has begun to gather in its fruits of temperance, self-respect, and culture; I cannot but hope that art will have something to show for its share in the good work, and something to contribute to its further progress. If for us architects the days of castle building be over, we may find a work, less showy perhaps, but as really noble in educating the taste of an emancipated people.

Let us now consider, for a few moments, the peculiar requirements of modern cities, as they present themselves to the architect.

Any large assemblage of people in one place must, of course, give rise to difficulties as regards the provision of healthy dwellings. A cottage, standing in its own grounds, may long be deficient in many things, without causing more than a passing inconvenience. Soon other cottages are erected near it; these press one upon the other, till waste spaces are covered and houses touch. The ditches are defiled, springs are polluted, verdure is banished, and the air is thick with smoke. The former country hamlet is now the centre of a great town, the only home of its poor, and only too often the hotbed of crime and vice. What can architecture do in such a case, but wait and plead, until the public sense of responsibility is roused to insist on the necessity of wholesome habitations for all classes? The architect may then point out the advantages that may accrue to the entire community by making arrangements which, while removing reproach, may add interest, convenience, and beauty to our cities.

But it is with other classes of buildings than the houses of the poor that we have to deal. While these need not be ugly, they cannot, of course, add much to the architectural ornaments of a great town. Such ornaments must be looked for in the public buildings, the banks, mercantile offices, and the dwellings of the wealthier inhabitants. On all public improvements it has long been admitted that the public has a right to speak. But though the principle has been admitted, the application of it has hitherto been far from complete; and even in utilitarian matters it is to be feared that some terrible catastrophe may one day startle the public mind by the revelation of deficiencies in our legislation, as applied to the buildings in large towns.

Take, for example, the case of theatres and other places of public assembly. It was

\* By Professor Barry. Sixth lecture. Delivered at the Royal Academy on Thursday, March 22nd.



but lately that hundreds of victims perished miserably at the Brooklyn Theatre, New York; and there are theatres in London which I never enter without anxiety, or quit without a feeling of relief. We have no public officer who can insist on the sufficiency of entrances and exits, proper width of passages, isolation from adjoining houses, and such matters. Stairs in new buildings must indeed be of incombustible materials; but they are too often narrow, ill-constructed, badly planned, and inconvenient, and the public has no choice but to submit. The evil is not only great but growing, for, in these respects, it is often our newest structures which are the greatest offenders.

Of course, when anything is wrong, people are apt to cry out on the architect, as if he were responsible, but this is not right. Wherever rents are high, as in London, land is dear, and the temptation to a lessee to recoup himself in every legal way is irresistible. A difference of a yard in the width of a passage may give an extra row of seats, worth hundreds a year to the manager; and he knows that the public, over thoughtless, when its amusement is concerned, will rush to a theatre, heedless of its hidden perils. I have mentioned theatres, not because they are the only buildings for which public control is needed, but because they are among the most obvious specimens of the class, which includes concert and lecture rooms, churches, and all places where the public assembles in large numbers.

We have suffered, as to these matters, in London, for our vastness, which has always hindered the establishment of a central municipal authority, charged with an effectual control of architectural questions; and as there is a daily-increasing reluctance on the part of the Imperial Government to deal with metropolitan questions, Londoners are constantly falling between two stools, and have less power over their affairs than is possessed by the inhabitants of other English towns of far less importance. The Metropolitan Board of Works, although a modern creation, has shown itself alive to such responsibilities as the jealousies of public policy have allowed to be placed upon it, but it has suffered repeated checks from such causes. A well-meant attempt was made by this body, some time back, to obtain from Parliament such powers of supervision over theatres and public buildings as I have alluded to, to be used by the Board only in the interest of the public. Unfortunately, the application was refused; but it is quite clear to me, that the question must be faced, and that soon, as one of serious importance.

In the meantime, architects are not only bound to try to arouse the public interest in these matters, but their own responsibilities are intimately concerned in their satisfactory solution. Their profession is one of the most anxious, and, I may add, thankless, in existence. If there is anything wrong in our houses, it is always the architect who is accused, and no one thinks or cares to inquire how far he has been controlled or overruled. Indeed, he is made answerable in thousands of cases as to which no architect worthy of the name has ever been engaged, and in some of our most important works public bodies appear to wish to deliberately ostracise the best men by insisting on the lottery of competition.

Now, I yield to none in affirming that an architect must bear all fair responsibility; but if it be made clear that our public regulations are insufficient to secure good building, and even to provide for the safety of the public, it is evident that in this free country, in which the popular voice is all powerful, the real responsibility must rest with the public itself.

Architects are constantly publicly instructed, with emphasis, by self-constituted advisers as to evils in our buildings, some of which are imaginary, while of others they are well aware, and remedies are presented with all the confidence natural to irresponsible critics. But it is forgotten that such remedies would frequently bring incon-

veniences of their own, and that they are generally costly, and would therefore raise rents. Houses in London are, moreover, mostly built on land which is leased for a term of years, which, I am sorry to notice, is becoming more and more restricted in some recent leases. Doctrines of tenant-rights have not reached the metropolis; but it is idle, in my opinion, to hope for substantial improvement in our domestic architecture as long as men are called upon to build for the ultimate advantage of others. It is scarcely too much to say that in solidity of construction, and in provisions for safety in our places of public resort, we are behind most, if not all, of our European contemporaries. These are matters which are most important to the architect; for, without good and solid construction, architecture is a sham.

We know how careful the Romans were as to the corridors and exits of their theatres; and their work will remain, as a guide to future ages, after many of the flimsy structures of to-day have totally vanished. If the architect be, as I have said, greatly interested in these questions, they are to the public of vital moment, and it is for the public to deal with them through its chosen representatives. It is useless for an architect to provide exits in his plans, which are afterwards built up and disused because each doorway is a source of expense to the management, and there is no encouragement to design good houses as long as people prefer low rents to healthy homes.

In country places, where buildings are, perhaps, placed in spacious parks, isolated from all contact with others, it may, doubtless, be contended that any regulations in the interest of the public are uncalled for, and would be an unnecessary interference with individual liberty; but in towns the case is different. Here a man cannot live only for himself; he must so enjoy his own rights as not to injure his neighbour's. The principle of building regulations has long been conceded, and it only remains to determine their extent and application. Such regulations are, indeed, essential to the well-being of the community in modern cities.

Another important point in our civic architecture is the selection of materials, as bearing on both the artistic and the utilitarian side of our art. We have most of us admired the timber houses, so much in favour with Mediaeval architects, and some are doubtless found to regret their disuse, and to declaim against any prohibition of such a manner of construction in our modern towns.

A careful study of old timber houses will show us that their beauty depends on the sensible application of true principles of construction and decoration, designed with a careful recognition of the essential characteristics of the material employed. The forms of all corbels, windows, and roofs are such as are suitable for wooden construction, and for no other. But we do not find that wood was chosen by our ancestors, except from necessity. It was at hand in the great forests and woods of a sparsely populated country; it could be worked with simple tools, and quickly erected. Carriage was easy for it, as compared with more solid and weighty materials: it presented, in fact, the cheapest and easiest method of house-building; it was consequently generally employed, and the old builders brought to bear upon its construction all their skill, as well as their knowledge of art, for its ornamentation.

The crowding of hundreds and thousands of houses into cities, such as London, could not be foreseen; but I have shown, in one of my former lectures, how soon the civic authorities became aware of the danger of wooden buildings, and have described the simple remedies which they prescribed.

In modern architecture wood bears a more subordinate place, and in so treating it we do but follow the same principles of common sense which guided our forefathers. They built chiefly in wood, because they had practically no choice but to do so. We have materials of all kinds brought to our doors,

and if we attempted to employ wooden construction, as they did, the material would soon reach a famine price, and ultimately fail us. Thus, while we may not copy their practice, we may well be guided by similar principles, and may study, in a similar spirit, the qualities of the materials we employ, with a view to that rational application of ornament which has ever distinguished good art from bad.

Having already spoken to you on the question of materials, and their effects on originality of architectural design, I will not dwell again upon that part of the subject. As, however, I have referred to danger from fire, I may, perhaps, be allowed to say a word as to the use of incombustible materials in our dwellings and public edifices. We do not need to be reminded how terrible an enemy fire is to architecture and to human life. We know what it has done in former times to London, and the misfortunes of Chicago and Boston are recent. Hardly one of our theatres has escaped, and few even of our cathedrals have not been injured or threatened. It is, therefore, unnecessary to say that architects are bound to study this question, which is far from simple. Where a great body of fire exists, as in a warehouse stored with inflammable substances, such materials for supporting fire bear so large a proportion to the constructional portions of the building, that the latter are simply overwhelmed, and wood, stone, iron, marble, and brick are involved in one common ruin. This has led some persons to think that a fireproof building is impossible, and, perhaps, in the strictest sense it is. Not so, however, practically, in the vast majority of cases with which architects have to deal. Because iron and stone have yielded, when exposed to intense heat, it does not follow that they may not be employed with advantage when all the circumstances of each case have been fully considered, and I cannot subscribe to the doctrine that in public buildings it is better that the stairs should be made of wood, which will burn, rather than of stone, which will not.

There is and should be no difficulty, at any rate, in so constructing our domestic architecture that the existence in our houses of any large body of flame sufficient to cause danger to materials not in themselves capable of ignition, should be a physical impossibility. Unfortunately, this is seldom or never done, from causes to which I have already adverted. Houses are built to last for a term of ninety-nine or even eighty years, and their builders prefer to pay premiums to fire offices rather than to invest additional capital in their buildings so as to render them permanently safe from danger by fire.

The application of incombustible materials to ordinary buildings is still in a backward state in England, more so by far than it is in France, for example; and with reference to theatres, it has scarcely been seriously attempted. In these buildings the stage and its appurtenances must probably be always more or less inflammable, although chemistry may help us in this respect; but, as regards the auditorium, no difficulty exists which is not to be surmounted by any skilful architect, and a dangerous fire in this portion of the building ought to be an impossibility.

It is, indeed, even now panic rather than actual fire that constitutes the most terrible danger, in case of accident; and if the audience were conscious that the construction was as it should be, if they saw wide corridors and ample staircases, of materials which will not burn, we should never again have to deplore such a calamity as the American catastrophe, already adverted to.

With the theatres, as many are now, it is quite right for the Lord Chamberlain to regulate the number of chairs, and to insist, wherever he can, on any precautions against the spread of fire which his experience may suggest; but the evil is hardly touched by such palliatives. We require regulations as to plan and construction at the outset. It is not enough to seek to improve our dangerous structures; but the construction of similar







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buildings should be made illegal. I leave this subject, as I began, by saying that the matter is one not only or chiefly of architectural importance, but of public interest, to be dealt with by our rulers as soon as they have come to be in earnest on such questions.

(To be continued.)

## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

THE opening of the new Crow-street Theatre, and the series of accidents and misfortunes preceding and following that event, had a most depressing influence on the management of old Smock-alley. About the middle of October, Victor, the deputy-manager, came back from London, and prepared for the contest. Soon, however, it became known that Sheridan hesitated coming back to Dublin; and, during days of anxious expectation, fears and hopes alternated at Smock-alley. At this crisis, Brown, the late manager of the Bath company, who had been engaged by Victor, arrived, and filled up a hiatus. "The abilities of this gentleman," writes Hitchcock, "yet live in the memory of many, and those who acknowledge that in a particular line—such as the Copper Captain, Benedict, Brass in the 'Confederacy,' Don John in the 'Chances,' &c.—they never saw a better, not even Mr. Garrick excepted, though they were amongst his most favourite parts."

Brown proved a fortunate acquisition, but the time of his appearance was unfortunate, and, notwithstanding his merits, they were not sufficient to make headway against the new and determined opposition. At Smock-alley Brown opened with his Copper Captain; a Mrs. Sheriffe, from Bath, an actress of some merit, played Margaritte; and Mrs. Kennedy, formerly Miss Orfeur, Estifania. The financial result of the first night's performance was £12, and the prospect was the reverse of cheering. We are told, however, that what the audience wanted in numbers, they made up in applause, which was unbounded. The house on the second night brought £28, and upon the third, close upon £40. The "Copper Captain" became the established comedy of the season.

Digges arrived in Dublin from Edinburgh about the second or third week after the opening of Smock-alley, with Mrs. Ward; and his timely accession to the forces raised for awhile the drooping spirits in the old house. Digges had rapidly risen since his first appearance, and, being a great favourite, had been "pitched upon by Sheridan as the only person likely to oppose Barry with any likelihood of success." Mrs. Ward was described as a very useful actress, equal at that time to any in her line at Crow-street.

Though the fierce theatrical opposition in Dublin ultimately resulted in a crop of mischief, yet the public for some time were favoured with rich treats. It was the means of concentrating in this city a number of eminent performers, and bringing to the surface other names which afterwards became noted. There were present, among others, in Dublin at the time we are writing of, Barry, West Digges, Heaphy, Dexter, Woodward, Jefferson, Walker, Sowden, King, Ryder, Brown, Isaac Sparks, Glover, Arthur Kennedy, Francis Aicken, Stayley, Veron, Wilder, Mrs. Fitzhenry, Mrs. Ward, the two Miss Phillips, Mrs. Chalmers, Mrs. Chambers, Mrs. Kennedy, Mrs. Storrer, Mrs. Walker, Mrs. Jefferson, Mrs. Dancer, Miss Mason, and others.

The Mrs. Dancer mentioned was the actress so well known afterwards as Mrs. Crawford. She was married three times: her first husband was a Mr. Dancer, her second, our own Spranger Barry, and her third, Mr. Crawford. This actress deserves, not only on account of her abilities but her connection with Barry, more than a passing notice here. She was a native of Bath, and had been only a short time on the stage before her appearance in Dublin.

\* See ante.

She was engaged from the York theatre, none anticipating the talent she afterwards displayed. She made her bow for the first time in Ireland at Crow-street on the 8th of November, 1758, in the part of Cordelia to Barry's Lear, and her second was in Monim in the "Orphan"—"characters," writes Hitchcock, "well chosen, especially the latter, to display the pathetic powers and exquisite sensibility which so peculiarly characterise her acting above all others"; and he adds, "justice, however, obliges me to confess that her first season did not promise that perfection she has since attained, and that many of her first efforts were regarded by the public eye with coldness and indifference. Hence 'tis highly probable but for the instructions of so great a master as Mr. Barry, Mrs. Crawford had never arrived at her present excellence."

Let us see what our dramatic historians and critics have to say concerning this thrice-married actress, and wife for some time of a great Irish actor. Boaden, in his "Life of Kemble," writes thus:—"She looked still a fine woman, though time, while it had taken something from the elegance of her figure, had also begun to leave its impression on her features. Her voice was somewhat harsh, and what might be termed broken. In love speaking it resembled the tone of passion in other speakers. It was at no time agreeable to the ear; but, when thrown out by the vehemence of her feeling, it had a transparency of effect that seemed absolutely to wither up the hearer—it was a flaming arrow—it was the lightning of passion. Such was the effect of her almost shriek to Old Norval, 'was he alive.' It was an electric shock that drove the blood back from the surface, suddenly to the heart, and made you cold and shuddering with terror in the midst of a crowded theatre."

In writing of Mrs. Siddons in another place, Boaden says:—"Perhaps the most serious moment of her professional life was that in which she resolved to contest even that character (Lady Randolph) with her rival Mrs. Crawford."

"Mrs. Barry (Mrs. Crawford)," observes Dibdin, "had more of Garrick's merit in tragedy, and was equal to quickness, passion, rage, and an exposition of all the terrible and turbulent passions. Common grief was too tame for her expression; she knew not how to insinuate herself into the heart—her mode was to seize it. Admiration was not enough; she must beget astonishment. This difficult effect, it must be confessed, her acting very often produced; but it seldom happens that such bold and forcible strokes of art are free from inequality."

Campbell holds, "though even in her best days it appears that she was too vehement in action, and that she neglected to insinuate herself into admiration from her ambition to create surprise, yet, still it is allowed that she could produce astonishment deep and thrilling. The effect of her question, as Lady Randolph in 'Douglas,' to the peasant respecting the child, 'was he alive,' was perhaps never surpassed upon the stage. Bannister told me it made rows of spectators start from their seats." The author of "Records of a Stage Veteran," in rather subtle language, says:—"Mrs. Crawford I remember well; 'a fine woman, a sweet woman,' doubtless she had been—nay, still was when I first beheld her; but a good actress she never could have been." J. Taylor draws this rather unpleasant picture of the great actress:—"Though once most elegant in her deportment, she became at last rough, and her person had the appearance rather of an old man than one of her own sex." Age is a great leveller, and a fell destroyer of beauty in face and form, and Mrs. Crawford could not be made "beautiful for ever," even had Madame Rachel lived in her time as in ours. The following personal sketch of Mrs. Crawford appeared in an article in *Blackwood's Magazine* in 1834: "Mrs. Crawford acted from 1759 [previous as we have shown] to 1797. She was the daughter of an apothecary at Bath, and was

of an amorous temperament. Somebody or other jilted her, it is said, in her seventeenth year, and the misfortune so deeply affected her that, in the vain attempt to reconcile herself to it by going to the theatre, she fell in love with an actor of the name of Dancer. Him the poor forsaken girl, who appeared in a consumption, married in spite of her physician and all her high-born relations, who thought the connection a disgrace to the pestle and mortar. Mrs. Dancer soon became the star of the Dublin theatre, and a widow. She lost but little time in giving her hand to the handsomest man on the stage, Spranger Barry, then called the Irish Roscius, and the Silver-Tongued. With him she led a life of happiness and fame, and for many years under Garrick's management was the delight of Drury-lane. In 1777 Barry died and she married a third husband, who was a brute, as third husbands generally are, and broke her heart. She was then no longer young—though not old—and domestic distress cast such a damp over her genins, that frequently she could only be said to walk through her parts. On the appearance of Mrs. Siddons, she came from Dublin to act at Covent-garden; but, a faded beauty, some years on the wrong side of forty, 'paled her ineffectual fires' before the blaze of those resplendent charms, and her genins showed like a dying lamp in the meridian sun."

Whether third husbands are always brutes or third wives always angels, we will not stop to inquire; but certain it is that poor Mrs. Crawford met in her third husband an unfeeling and worthless fellow. She died in 1801, and lies by the side of her second husband, Spranger Barry, in the cloisters of Westminster Abbey.

Returning—it appears that the general opinion ran strongly in favour of the new theatre in Crow-street, though there were some capital performers in old Smock-alley. The arrival of Sheridan, with his reinforcement, was thought in the meantime would equalise the forces. While anxiously waiting for the Sadler's Wells contingent, Digges and Mrs. Ward opened in Hastings and Jane Shore, and appear to have been well received. These last two performers were the originals in Home's tragedy of Douglas, which they had performed for several nights with success at Edinburgh. The last play was got ready with great expedition, and though announced at the rival theatre, it was acted for a number of nights at Smock-alley, without being attempted at Crow-street. Temporary expedients, however, afforded but little relief to the management of the old theatre; and anon the startling news arrived in Dublin that a ship containing the pantomime plant, the Sadler's Wells contingent, Theophilus Cibber the actor, Mr. Maddox the wire dancer, with upwards of seventy passengers besides, perished on a dreadful stormy night on the coast of Scotland. This sad November catastrophe was a terrible and fatal stroke, but the cup of bitterness and disappointment, full to the brim, followed quickly in the announcement that Sheridan, on whom the Smock-alley company solely relied, declined coming over. Writing of this crisis afterwards, Victor believes "that he certainly intended it, and in consequence put himself to great inconvenience in the summer by advancing the money necessary for purchasing and forwarding the scenery and machinery of the pantomime, and other relative expenses. And besides that loss, by his coming he knew a losing season must be the consequence, therefore that he was prevented by the unhappy situation of affairs, from coming to serve himself as well as his company, must be called his misfortune and not his fault." Still another and a supplemental blow was given to the last hopes of the Smock-alley company.

Mrs. Fitzhenry, on hearing that Sheridan had given up the idea of coming back to Dublin, and who until that time remained neutral, though six hundred pounds salary was offered to her by Victor, quickly passed over to the opposition and signed articles at



once on Barry's terms. Victor, conscious of his position, and seeing it was useless to contend against fate, proposed that benefits should commence in January at Smock-alley, which were to be got through as well as circumstances would allow. By the adoption of these expedients the end of March would be reached, at about which time the assistance of Macklin and his daughter was promised for a dozen of nights.

The proposition of Victor was embraced by the company as a last resource, the benefits immediately began, and, all things considered, were to a degree very successful for that time. Upwards of three thousand pounds were taken in twenty-eight nights; but as there were some arrears due to performers, owing to the badness of the receipts at the opening of the season, Victor took but sixteen pounds in cash from each to pay the necessary expenses, music, servants, sundries, &c. It is stated he allowed every person twenty pounds for their arrears, making forty pounds the sum then usually paid by each performer for their benefit charges.

At Crow-street the new managers had yet but a moderate degree of success, notwithstanding the novelties they introduced. Affairs appear to have been conducted with regularity, and the salaries of the performers duly paid. The company was well selected for their respective parts. Barry, Dexter, Jefferson, Sowden (who had left the old company), Mrs. Fitzhenry, and Mrs. Dancer supported the tragedies with credit. The comedies, too, were well sustained, some of the above ably supporting King and Woodward. Under the direction of the latter, towards the end of the season, the pantomime of "Harlequin Fortunatus" was prepared, brought out, and received with applause. This pantomime was reproduced several times in Ireland in subsequent years with success.

'Tis the last straw, it is said, which breaks the back of the camel; and the Smock-alley company for the time being received their crumpling up through a communication from Macklin to Victor, informing the latter that it was impossible for him to fulfil his promise. He urged his daughter's state of ill health would not permit her to undertake such a journey. Immediately after this communication Victor made up his mind to strike his colours. Sheridan's instructions having been received by him, he, on the 20th of April (1759), summoned together the whole company, and communicated to them all the last piece of information. He also there and then candidly informed them of his utter inability, through a series of unforeseen disappointments, to keep them together any longer. The company was forthwith dissolved from acting any further on Sheridan's account.

Between the fall of the curtain at Smock-alley under Sheridan's management and its rise under a new manager, there is something yet to be told of the discharged company, and yet a little more, and not the least, with credit to Thomas Sheridan, the reformer of the Irish Stage.

## ADVERSARIA HIBERNICA,

### LITERARY AND TECHNICAL.

In the "Monthly Register" of the London *Literary Magazine and British Review* for July, 1788, there are some items of Irish news, probably extracted from Irish newspapers, and summarised. Under the date of Dublin, September 20th, it is said:—"Every day adds to the number of failures in this city. Since our last no less than three houses have stopped payment in the west end of the town; the gross amount of their deficiency is very considerable, and, added to the number of bankruptcies that have previously taken place, must have a mischievous result."

Again, we have a picture, we suppose, of the state of trade in the Northern Athens:—"Affairs are not so bad in the North of Ireland, and as was apprehended from the failure of the Blakeleys. At a late meeting

of the creditors, a statement was laid before them, by which the parties prove that they are able and willing to pay 12s. 6d. in the pound. This circumstance has raised the drooping spirits of many desponding families. It is also agreed that another meeting of the creditors should be held when called on by the assignees, in order to know whether it will be advisable for them to supersede the commission of bankruptcy which has been issued against them."

Although trade in general, and the building trade in particular, prospered during the era of the Irish Parliament, yet there were some industries, especially that of the weaving, in Dublin and elsewhere which suffered severely at intervals. In 1793-4 in this city there were riots occasioned by the severe distresses felt by the weavers on the Coombe and in the Earl of Meath's Liberties.

We are tempted to continue our extracts from the *Literary Magazine*, although the subject-matter is not kindred to our general materials. Many of the items are passing strange and amusing, and, as they afford a glimpse or glimpses of the dead past, their resurrection here may interest the Irish reader:—

"October 16th.—There is at present in our garrison [Dublin] a private soldier of the name of J——n [query Johnston] who is one of those eccentric characters rare to be met with in life. He is the second son of Richard J——n, of the County of Westmeath, a gentleman possessed of about £1,200 a-year; he has had a most extraordinary fondness for military life, which neither hardship nor misfortune, time nor experience, could cure him of. At the age of eleven he ran away from school, and enlisted as a fifer; after the lapse of a year he was discovered and brought home; he was then sent to a seminary in Scotland, and no less than nine times enlisted for a common soldier, and was as often purchased out. At length he was sent to the West Indies, to a near relative, but, unable to refrain from his favourite mode of life, he prevailed upon his friend to purchase a pair of colours for him; these he soon afterwards sold, and, after a variety of changes, was totally abandoned by his relatives. He is now on garrison duty, and often amuses himself with tuning 'How Merrily we Live that Soldiers be,' 'How Happy is the Soldier that lives on his Pay,' and similar compositions in that state of gaiety which generally is the result of cheerful spirits and little thought."

Under the date of Tralee, September 11th, is the following odd and amusing item:—"A very extraordinary circumstance happened in this county [town] last week, which has given rise to a variety of foolish conjectures and superstitious absurdities. Mr. Brown, of Iveragh, on Monday morning last left his family, he being in full health and uncommonly good spirits, and went to one Toomey, a carpenter in the neighbourhood, whom he prevailed upon to take his measure, and insisted that a coffin, handsomely ornamented and suitable to his size, should be sent him on Tuesday evening, as he was convinced he should die on Thursday. Mr. Brown, having returned home, prepared the family for the visit of the unwelcome stranger, apprised his wife of his certain death, gave the necessary directions for his funeral, had his coffin laid by his bedside, and spent from Tuesday to Thursday with the curate of the parish in the solemn duties of a good Christian. Mr. Brown being of a passionate temper, was indulged by his wife in what appeared to her disagreeably ridiculous, and on Wednesday night he lay in a shroud, and was adorned with other insignia befitting the gloomy pageant. Thursday morning, about six o'clock, Mr. Brown made his final exit, according to his predictions, and expired without a groan. Mr. Brown had served in the Prussian army, was a robust man, of a studious turn, and aged about fifty-four, of a respectable family in the north, and greatly esteemed by the neighbouring gentry. His circumstances being on the decline, Lord Kenmare has humanely pro-

mised his protection to his two fine boys, whom he has left to mourn the extraordinary catastrophe."

Was there no coroner in Tralee in those times to hold a quest, and see whether Brown's inside was able to hold out any longer? If a man feels he must die, we don't see he could do better than Brown, and lay him down quietly, after making due preparations. Brown was to be commended for his foresight and prudence respecting his soul and his coffin, and he doubtless saved his family a great deal of money in settling with the undertakers beforehand, and seeing that his last suit fitted him to a T, and was well aired for its uses. Brown, however, was not the first or last of his race who had their graves marked out, and their coffins made, and well seasoned before filling. The present writer knew one or two of his countrymen who had their coffins made years before their deaths, and their graves marked out. If he remembers aright, one of these rather odd though nowise foolish men, had his intended coffin fixed in the angle of his room, fitted with shelves to act as a cupboard for books and papers, and betimes refreshments. A man who during his life is careful of his clothes and other effects, would likely be careful of his coffin, if he made up his mind of having it beforehand. Undertakers seldom or ever trouble their minds about putting seasoned wood into coffins, although as a body they are the driest of mortals, and are prone to saturate their skins with draughts of whiskey and gin in any quantities.

A Dublin monthly magazine, in its "Domestic Intelligence," under the date of Limerick, January 29, 1794, says, on "Monday last Richard Hart, Esq., brought to town, and lodged with the mayor in the council chamber for inspection of the public 68 potatoes, the produce of one single shoot, more luxuriant than the rest of the shoots in his garden, according to Dr. Maunsell's mode of culture; he also brought the stalk nailed to the board, in order to preserve it, which measures 7 ft.; his gardener made affidavit of the culture before the mayor. This shows the great excellence of the doctor's discovery, and how much the public are indebted to him, and should induce all such as have heretofore thrown away the shoots, to preserve them, and plant them the next season, according to his plan. We are happy to hear that the doctor has made some more useful discoveries from the last year's culture, which he means to communicate to the Dublin Society, which it is to be hoped will render the culture from the shoots universal in this kingdom."

Alas, alas! the potato has been experimented upon in numerous different ways—from the seed or apple, from the shoot, from divers quarterings of the potato itself, by the "whole hog," and by transplantation; but, after all, the potato famine came more than once, and, the poor root, with its luxuriant growth of rotten fruit, was left out in the cold to die, and thousands of its cultivators and eaters died likewise in want of an eatable specimen of the tuber *S. tuberosum*.

Now that the *Colorado Beetle* is creating a scare among agriculturists and others, and lady-birds and potato flies and other bugs, beetles, insects, and grub, winged and un-winged, are being confounded, a word in passing may not be amiss. The potato fly (*Cantharis vittata*) is a kind of *Cantharides* mostly found in North America. It is a dull tanny yellow or light yellowish red colour above. On its head it has two black spots, and two black stripes on the thorax, as also on each side of the wing covers. The under side of the body, together with the legs and antennæ, are black and covered with greyish down. In length the potato fly is a little more than half an inch. This insect commits great destruction in potato fields, attacking not only the potato plant, but other vegetables.

Dr. Maunsell, of Limerick, addressed two letters to the Dublin Society in February, 1794, "on the Culture of Potatoes from the Shoots," in which he undertook to show that



the strength of potatoes lay in the shoots, and condemned the system of burying so much of the food of man in the ground, as is done in the ordinary culture of the root. These two letters will be found in the May and June numbers of the *Anthologia Hibernica* for 1794, and are not unworthy of perusal even at this time, on account of the manner in which the doctor treats the subject, the deductions he draws, and the reflections he indulges in.

*Apròpos* to the above, it may be added, that the letters alluded to of the Rev. W. Maunsell, and which excited some interest and agitation at the time, were also printed in pamphlet shape by Sleater in this city. At the same time two other letters on the same fruitful potato subject were published, also in pamphlet shape, by the same publishers, from the pen of Thomas King. These last two letters were addressed to Samuel Hayes, of Avondale, County Wicklow, a member of the Committee of Agriculture, and of the Royal Irish Academy.

In referring to the discovery, and of the two preceding letters, Mr. King asserts to have been made by himself twenty-two years previous, though never published. He does not evidence any feelings of jealousy towards a rival discoverer, but he modestly differs from Dr. Maunsell in certain material points touching upon the danger of entering too widely in his favourite project of planting potatoes from the shoots, to the exclusion of the ordinary mode. The Dublin Society at the time also ordered Mr. King's letters to be published and distributed through the country gratis.

In 1794, during the somewhat exciting discussion upon the natural root, a Dublin poet, whose name has not descended to us, wrote in the *Anthologia* the following rhapsody on "The Potato":—

"The prattling babes, that wanton on the breast,  
Plunge into paradise, amid the down  
Luxuriant of the sweet mamma!  
Dear creature! all so fair: redundant milk  
Pours from her elegance, all taper, plump!  
And yet, believe it, nurse, nor tepid milk,  
Nor beauty's self, luxuriant in expanse,  
Fills more the youthful offspring of the realm  
With health and vigour, than the balbous Roots—  
Roots of pure fruit, all-flowery from the ground,  
Diffusing plenty 'mong the sons of men!  
Fair is the blossom, delicate and pure,  
That decks these honours of green Erin's isle;  
Nor shamrock's self should in their hats be worn  
With pride near equal to this beauteous Flower,  
Fertile itself: full efflorescent Root,  
That fills our Irish with its fertile power,  
Fertile themselves: abundant to pour forth  
In arms, or beauty, all the wealth of man!  
All hail, Sir Walter Raleigh! may the sons  
Of Ireland, festive, on thy natal day,  
Exalt these Flowers redundant to thine honour!  
And, while they bless the rising thousands round,  
Revive the memory of so great a gift!  
And may philosophers search other realms,  
To rival thee in some greater gift;  
To shower abundance upon these green Isles—  
Perhaps the Bread Fruit, to expand sublime,  
Its boughs, numbrageous, loaded o'er with fruit:  
Such plenty as among the realms of man  
Remains unparalleled; though next appears  
The wealth abundant of our Irish fruit,  
And fruit it is beneficent, superb!  
More than ananas, or nectarious grape."

We think our readers have had sufficient rhyme and reason, or prose and blank verse, upon the potato. In our youth as school-boys we often heard the lines:—

"The sweetest divarshion under the sun  
Is to sit by the fire till the praties are done."

It is a mistake to suppose that Irishmen alone are partial to potatoes. Having travelled not a little of the British Islands, and sojourned in many cities and towns, we can assert with confidence that the genuine "John Bull" has as great a weakness for a flowery potato as any son of the Emerald Isle. H.

#### AGRICULTURAL LABOURERS' DWELLINGS IN IRELAND.

In the House of Commons on Friday last, on the motion of going into committee on the Appropriation Bill, Mr. Callan called attention to the condition and state of the dwellings of the agricultural labourers in Ireland, and the obstruction to, and difficulties placed in the way of, carrying out loans for purposes

authorised by the Legislature, by the Board of Public Works, Ireland. The hon. gentleman quoted largely from the work of Mr. Henry Coulter to show the wretched condition of the dwellings referred to, and contended that all the legislation on the subject had been thwarted by the Board of Works. The wretched manner in which the labouring classes were housed was the main cause of Irish discontent. No perceptible improvement had taken place in this direction since the Devon Commission in 1844, owing principally to the fact that the rules which the Board of Works enforced rendered it almost impossible for *bona fide* labourers to take advantage of loans. He suggested, therefore, that a Royal commission should be appointed to inquire into the whole question.

Sir Michael Hicks Beach, the Irish Chief Secretary, admitted the importance of the subject, and that the condition of the agricultural dwellings in Ireland was not satisfactory. There had been advancement, however, during the last few years, and he failed to see that any practical purpose would be served by another inquiry being made through the medium of a Royal commission. They had a right to expect that some improvement would be brought about by the operation of the sanitary laws, his attempt to consolidate and amend which the force of circumstances had, he regretted to say, obliged him to defer until next session. He would not deny that the exceptional legislation which Parliament had sanctioned in favour of Ireland had not succeeded to the extent he could have wished; but, at the same time, it must be borne in mind that within the past year a considerable increase had taken place in the loans which had been granted by Government for building purposes. He was unable to pledge himself to fresh legislation, but he promised that the committee which had been appointed to inquire into the operations of the Board of Works should also consider whether anything could be done to improve the method in which that body exercised its lending powers under the Agricultural Labourers' Dwellings Act.

In our yearly notices of the Reports of the Commissioners of Public Works in Ireland, and at other times, we have directed attention to the condition of the home of the agricultural labourer;—indeed it is a subject which for long years has received constant attention in the pages of this journal.

#### THE CITY SANITARY POLICE.

AMONGST the business for which a special meeting of our Civic body was summoned on Monday, was to consider a proposal to reduce the number of police under the pay of the Corporation, who are *supposed* to perform sanitary duties. Mr. Murphy moved—

"That the services of the sanitary police be discontinued from and after the 3rd September, 1877, being the next quarter-day. That notice hereof be given to Colonel Lake, or his successor, and that the Public Health Committee be authorised to advertise for, appoint, and employ other suitable and fit persons instead thereof, at salaries of £1 per week for eight sanitary inspectors, and £1 5s. per week each for the two superintendents, and that clothing, as like as possible to the police uniform, and of an improved pattern, be provided for this staff."

He said that when the Health Committee first commenced its operations, £1,400 or £1,500 a-year was expended. In one year recently, however, the expenditure had risen to the large sum of £4,000, and last year the expenditure was £3,000. That sum could not be afforded; it was too high. One important item of this expenditure was the sum paid to the sanitary police. A sum of £1,500 a-year was paid to the police alone. By the resolution he now proposed they would have an efficient staff of men, though only half the number. By the means proposed the expenditure would be lessened by about £800 a-year. He should be unwilling to do any act which might lessen the efficiency of the committee. However, he would ask would the proposal

to levy a borough rate of 3d. in the pound be received? That could not be done at present, and it was of the utmost importance that efforts should be made towards economising expense.

Mr. Maclean was understood to say that as this resolution involved an entire change of what had been going on for the last ten years, and as many points in it required to be looked into before such a course was entered on, it would be better to refer it to a committee of the whole house for consideration. He was very much afraid that if they rushed into this without consideration, they would incur far more expense than at present. He would move as an amendment that it be referred to a committee of the whole house, which was agreed to.

#### NEW GLEBE HOUSE, CLONTARF.

THE first stone of the new glebe house for the parish of Clontarf, was laid yesterday afternoon, by Mrs. Cuppage, daughter of J. E. V. Vernon, Esq. The site immediately adjoins the handsome church built a few years ago. The glebe house will be of three stories including basement, which will comprise kitchen, servants' rooms, scullery, coal store, &c. On the first floor will be drawing room, 21 by 16, with large bay windows looking south: dining room, 17 by 17. On the upper floor there will be five bedrooms, dressing-room, bath-room, and w.c. Off the front hall, to the right, will be a study 12 9 by 14; and to the left a house store, with butler's pantry adjoining. The material for superstructure will be Courtown red brick with stone dressings. The cost, when completed, will be about £2,000, of which £1,000 has been borrowed from the Board of Public Works, under the Glebe Loans (Ireland) Acts, 1870-71-75. Mr. George Tyrrell, Russell-place, is the contractor, by whom the building will be erected from plans by Mr. Robert Phillips.

#### THE CITY PROPERTY AT BALDOYLE.

At a meeting of the Municipal Council held on Monday, Mr. Murphy said he desired to know whether No. 3 Committee had taken any steps in reference to the condition of Baldoyle. Was it within his lordship's knowledge that every cabin in the neighbourhood had fallen, owing to inclement weather? Some time since he (Mr. Murphy) had seen an advertisement for contracts for the execution of repairs at Baldoyle, but nothing had yet been done. There had been a resolution on their books for many years calling on the council to expend £1,000 annually in the building of cottages at Baldoyle. He was sorry to inform his lordship that since 1863 there had not been one cottage built. Up to that time, under the resolution referred to, there had been something like 30 cottages erected, to the great improvement of the neighbourhood.

Mr. Dennehy rose to order. The important matter referred to by his friend, Mr. Murphy, was one upon both sides of which much might be said. He would suggest that the matter should be brought regularly before the council on notice of motion.

Mr. G. O'Neill said he would state briefly what had been done in this matter by No. 3 Committee. An application had been made to the Board of Public Works for a loan of a sum of £2,000 to build cottages.

The Hon. Mr. Vereker—If we don't proceed with the business of the day, I shall move the adjournment of the council.

Mr. O'Neill said he could explain in five minutes what had been done by No. 3 Committee.

The Lord Mayor ruled that no discussion could take place on the subject without notice of motion.

Mr. Murphy—I shall give notice of motion.



### HOW THE SANITARY LAW IS CARRIED OUT.

At the Naas Petty Sessions, Mr. E. Molloy, executive sanitary officer, summoned Eliza Walsb for having four houses at Kill nfit for human habitation.

Mr. Molloy stated the case on behalf of the sanitary board. He said that in November last the sanitary medical officer reported to the guardians that there was a yard in a filthy stato, and that four houses, one of which has no back door, were unfit for human habitation.

Dr. Hayes, sanitary medical officer, stated that so far back as the 28th November last he reported this case, and nothing had been done in the matter!

The Clerk of Petty Sessions—The then defendant is dead!

Mr. Reilly, relieving officer and sub-sanitary officer, proved the service of the necessary notices on defendant in Kill on the 4th July.

Chairman—Are there any nuisances there at present?

Dr. Hayes—I inspected the same premises a week since, and the yards were clean. The house that had not a back door is not now used as a dwelling-house.

The defendant said she was doing her utmost with them. She had closed the house that is without a back door, and had the other requirements in course of preparation.

Mr. Molloy—This proceeding was brought on the sanitary officer's report as to the state of the houses and yard, but the report it was first founded on was dated so far back as November last.

Their Worships dismissed the case, as they considered, after hearing the evidence, that they had not the power to make the order sought for.

### SANITARY CONDITION OF LIMERICK.

At the meeting of the Sanitary Board (says a correspondent of a daily journal) another letter—probably the fiftieth—was read from the Local Government Board on the defective sanitary state of the city, and urging that greater attention should be paid to it, and a disinfecting chamber provided. A complaint was made that in one street a man and his family lived in the house with his horse, and that the dwelling was in a most filthy condition. The district medical officer was of opinion that persons like the owner of this house should not be made "objects of persecution and ruined by a strained interpretation of the Public Health Act." The medical officer further informed the board that "sleeping near a horse was preferable to sleeping near many Christians," as they are to be found in Limerick. After this, is it any wonder that the Local Government Board should find fault with the primitive state of Limerick society?

### THE DUBLIN MUTUAL BENEFIT BUILDING SOCIETY.

The inaugural meeting of the above society was held at No. 5 Foster-place on Tuesday evening, 7th inst. The chair was taken by

Mr. THOMAS DOWLING.

The Chairman said—Gentlemen, I take the chair with much pleasure at this, I may call it, the first meeting of the Dublin Mutual Benefit Building Society. It is, as you are aware, established on the mutual principle—a principle which has been very well worked in many important institutions in this country. The society starts without preliminary expenses. It will be worked—and I hope successfully worked—by the combined intelligence and industry of the men who have formed the society. There will be no paid officers—no directors. Whatever profits we have will be divided amongst the members. The shares are said to be "shares of £100 each." That, as I think I mentioned on a former occasion, is really not the case. The

sum of £100 is put down to represent what may be derived by the shareholders at large. The purchaser of one share will be entitled, either by purchase or allotment, to participate in the funds of the society to the extent of £100. I am very much pleased to hear that something over 600 members have been enrolled, and they are not only enrolled as paying the preliminary charges, but they are enrolled nearly all as paid-up shareholders; so that in a very short time we will be able to have an allotment. The allotment may be £500; it may be a lesser sum; but, assuming an allotment of £500, the person who obtains that allotment will have a space of not longer than three months to find a profitable investment. If within that time he does not find a profitable investment, the money will have to be again allotted. If he purchase a house of the presumable value of £50 a-year, he continues to pay the society £50 for ten years, when he will have paid the society £500, and the house will become his own. No doubt the calculations are properly made; and I have questioned a gentleman here who represents the National Assurance Society. That gentleman entered into the whole matter, and he says that within a given number of years every member of the society will obtain an allotment, and, in addition to becoming the possessor of his own house, the money he has contributed will come back to his own pocket, with profits added. The society is, as I said already, not managed by officers. The only paid officer is the secretary, who will give you a vast amount of time and labour for the money he gets. Within the month, I think, it is calculated we will be able to have an allotment. When few allotments are made, the allotments, as a rule, will be made more quickly; for we will not only have the money from the shares, but the quarterly payments coming back from those to whom we have issued loans. I think that, having said so much touching on those features, it would be unbecoming in me to occupy your time with other observations. I have to remind you, gentlemen, that the provisional committee who up to this have worked in promoting the society, now as it were dissolves itself. They commit their trust to your charge, and hope that, having launched the bark, you will pilot it in safety into harbour.

Reference and working committees were then appointed, composed of gentlemen of whose business qualifications to carry out such a desirable scheme there can be no question.

### JOTTINGS FROM NEW YORK.

THE ASTOR REREDOS—STEWART'S MEMORIAL CATHEDRAL.

THE 28th of June, A.D. 1877, will be a red-letter day in the history of the Episcopal Church in America as long as the Republic shall stand. St. Peter's Day was chosen by the magnates of that denomination for the consecration of the Astor Reredos in Trinity Church, and the dedication of Stewart's splendid mausoleum at Garden City, on Long Island. From immemorial time it hath been the custom to preserve for the instruction and incitement of posterity the names of good and mighty men, whose great examples shall be the means of raising mankind to a higher plane further from earth and nearer to God, and hence these grand bequests. Not far from a million and a quarter of dollars was conveyed to the church on that day to celebrate the memory of two men who, if it had not been for their enormous wealth, would have dropped out of sight beneath Time's merciless wave, "unknelled, unconfined and unknown."

Entering Trinity Church by the eastern door, you see a little box, above which is the following inscription—"Whosoever hath pity upon the poor lendeth unto the Lord"; thus soliciting the alms of the faithful as they enter the gate of the sanctuary. Trinity Church is the richest church corporation in America, if not to-day in the whole world; its glebe lands

and tenures stretch east, west, north and south; its mighty revenue each year might serve as ransom for a king; and its influence in episcopal matters is felt to the furthest extremity of the continent. In positive grandeur and architectural chasteness it was surpassed by no church in the limits of the United States; it was a shrine worthy of God's worship in any land. On Thursday, 28th of June, while the *Te Deum Laudamus* and *Gloria in Excelsis Deo* rolled through its magnificent aisles in exquisite and glorious harmony—while trained singers at salaries of thousands of dollars were chanting praises to God—while the smoke of sweet incense almost hid the veil of the shekinah from the eyes of the wondering worshippers—a poor woman and four children were perishing of want almost under the shadow of the great spire reflected by the noonday sun. Trinity Church faces the Babel of Wall-street on one side with its gilded fanes and its ruined reputations; its back is almost on the slums where sin holds high carnival throughout all the year—summer and winter, spring time and harvest. Nought is heard here but curses and blasphemy; degradation and misery and crime are strongly entrenched at all times and in all seasons; murder and robbery are the records of almost every day,—for this is the home of the social Bashibazouks, the pariahs of society, the worse than heathen whom no gospel ever reaches, and whose ostracism from everything that is holy is as complete as if they were dwelling in the Hades. Trinity is not bettered by the Astor Memorial—a hundred thousand dollars have been recklessly squandered in senseless and unmeaning ornament to feed the pomp and vanity of its ministers, while thousands and thousands are perishing in this city for temporal and spiritual bread.

The great temple at Garden City, under which A. T. Stewart will repose, is expected to cost a million! When Macaulay's New Zealander shall get tired of sitting on the broken arch of London Bridge, and shall have placed his finished sketch of St. Paul's in the bottom of his carpet-sack, and enveloping himself in a hydrogenated gas-bag, shall land himself across the ocean in about an hour and a-half, and lighting on the spire of the mighty cathedral at Garden City, he shall ask the sexton (who he may possibly find taking weather observations in the belfry) "To whose memory was this church erected?" The answer will undoubtedly be, "One A. T. Stewart"—for his name will not yet have perished from the memory of men—"who died Anno Domini 1876." "What great and glorious work did he do that he is honoured by this splendid mausoleum?" persistently inquires the stranger. "He sold calicoes in Broadway," replies the sexton, "at ten cents the yard." Going over to Trinity, he will see the magnificent altar, then hoary with time and consecrated by age. "To whose memory was this gorgeous memorial erected, and what did the good man do to deserve it?" he inquires. "He made money while he lived—money, money, money!" From youth to age he rolled in millions. Gold, gold, gold, poured down upon him like the gilded rain with which Jupiter enveloped the glorious mother of Perseus; but he died and left it all behind. No poor man blessed him, no unfortunate wept for his taking off. In the city of his birth, where all his millions were accumulated, he leaves no monument behind, nothing but his gold and this. The library which bears his name, though a costly collection of books, is sealed to the million of people who surround it; and for any practical service, except to a favoured few, it might to-day be swept from the earth and it would never be missed, except by the librarian. It is not pleasant thus to write of two great men whose accumulated wealth represented half a hundred millions of dollars, and whose possibilities for good were unequalled in their generation, but living they coveted no man's love, and dying, sweet charity passes them by, for they have left her no gentle remembrancer.—*Broadbrim; in Armagh Guardian.*



THE ARTISANS', LABOURERS', AND  
GENERAL DWELLINGS COMPANY,  
(LONDON).

AN adjourned extraordinary general meeting of the Artisans', Labourers', and General Dwellings Company (Limited), was held last week at the Westminster Palace Hotel, to receive the report of the Committee of Investigation appointed by the shareholders at the extraordinary general meeting on June 2nd. The report, after tracing the various steps taken by the committee and the appointment of new directors to act *pro tem.*, proceeds to point out the "loose manner in which the cheques of the company have been drawn, having been signed and the amounts left blank." Under these circumstances it was not very extraordinary to find that in many cases materials had been purchased at an extravagant cost. A very great quantity of goods required had been bought of one man, which might have been far more cheaply purchased from the wholesale dealers themselves. The prices actually charged to the company had been most exorbitant, samples of which were appended as follows:—

	Price paid.	Market price.
Ventilators ..	£0 1 2	6d. to 8d.
Nails (cwt.) ..	1 8 0	£0 18 0
Kitchen range ..	1 12 0	1 5 0
Ochre (cwt.) ..	0 12 0	0 6 0
Oak varnish (gallon)	0 16 6	0 10 0
Copal, do. ..	1 5 0	0 17 0
Turpentine ..	0 3 1	0 1 10
Bronze green (lb.) ..	0 1 6	0 0 6
Iron fencing (foot) ..	0 3 6	0 2 0
Iron window guard ..	0 4 6	0 2 9
Air bricks (each) ..	0 0 8	0 0 2½

The committee believed that this excess of prices represented nearly £20,000 out of an expenditure under these branches of £50,000. The total sum paid as commission on the issue of shares was over £21,000, and the law costs showed a waste of money. One item of such costs was £280 for the company's costs incurred for a trivial action against a trade newspaper for libel, in which a verdict was entered for the defendants; and the opposition to licences for public-houses outside the company's estate had swallowed up a large sum of money, as also had a prolonged litigation with the Wandsworth local board with regard to drainage, and which the committee honestly believed could have been arranged amicably. The remuneration pay for the collection of rents had also been excessive. The committee consider that the purchase of the Cann Hall estate was a useless and imprudent act, as the development of the valuable Queen's Park estate held by the company was quite sufficient to occupy its resources for some time to come, and it was also abundantly clear that dividends had been mainly paid out of money subscribed for capital, while at the same time that capital was being invited and obtained from the public on the grounds that those dividends had been earned, and that if the irregularities and waste which had already absorbed so much of the company's capital had been allowed to continue any longer unchecked, the financial ruin of the company would inevitably have followed. The accountants' report was to the effect that the books had been indifferently kept; that erroneous principles of valuation had been adopted; and that sufficient pains had not been taken to ascertain the outstanding liabilities before striking the balance which the directors treated as profit. The accountants pointed out in reference to the bank loan of £55,000, that at the very time the company had on deposit £20,000 at 1 per cent. they had borrowed £35,000 at 5 per cent. The accountants' report concludes with an opinion that, until the Cann Hall estate and other unproductive lands are either sold or utilised, only a very small dividend can be expected upon the capital subscribed. The architect reports that the points referred to him were exceedingly unsatisfactory; that the cost of material had been unduly high, and obtained through channels where competition seemed to have been excluded; workmanship and material were of common description, entailing, in his opinion, heavy cost for repair in future years on the estates. He had come to the conclusion that the Cann Hall estate would be a profitable source of revenue if small well-built houses were constructed upon it. Messrs. Cheston and Sons write to us from 1 Great Winchester-street Buildings, E.C.: "Your report of this case in the *Times* of Thursday states that we acted for Mr. Staffery in some of the negotiations. You will, perhaps, allow us to state what we had to do with the matter. In December, 1875, we perused, on Mr. Staffery's behalf, the contract for the purchase of the Cann Hall estate, and subsequently examined the title. In March, 1876, on Mr. Staffery's instructions, we prepared the contract for the sale of that estate to the Artisans' Dwellings Company, and subsequently delivered the abstract of title, and settled on Mr. Staffery's behalf the conveyance of the estate to that company. Beyond this we had nothing to do with any negotiation either

for the purchase or sale of the estate, or with any negotiation of any kind relating either to the estate or the purchase-money."

The chair was occupied by the Hon. Evelyn Ashley, M.P., who, in opening the proceedings, said they had met that day in very peculiar circumstances, the gentlemen being there as members of the Committee of Investigation, and also, by force of circumstances, as members of the Board. After thanking the gentlemen who had taken part in the investigation, he said it appeared to him that the "irregularities" which had occurred were largely attributable to the want of energy on the part of the shareholders, who in future, he hoped, would not be so apathetic in looking after their affairs. The committee had now been in office about three weeks. They had found an enormous amount of work before them, and, as they came into office confronted with great financial difficulties, they were not able to give any accurate details regarding the company's prospects. They had found that there were deposits amounting to £53,000, and they were all payable at ten days' or a month's notice, while the only available money they found to be about £3,000 or £4,000. They had obtained a large advance of money at about 2 per cent. less than they had been paying to the bank, and ultimately they would save some £2,000 a year in interest. With regard to the deposits, the interest paid on them was 5 per cent., and the fact of having so many deposits was a serious risk. They had, therefore, met every claim on them in this respect, and they had refused to accept any fresh deposits. Referring to the estates in hand, he said they were well fitted for the purposes for which they were bought, but the present board were not now in a financial position to carry on the works on some of the sites, and they therefore intended to complete the buildings which were in an advanced stage of progress, in order that the rents might be soon secured. They desired now to obtain a return, however small, to the shareholders for their money, and leave the question of extension for some future time. Alluding to the prosecution now going on, he said the board felt that it was their duty, but a very painful duty, to initiate these proceedings. After the prosecution was begun, the whole of the facts were placed before the Home Secretary, who came to the conclusion that the expense of the prosecution should be borne by the Treasury, thus relieving the shareholders of the expense. The prosecution was for the benefit of the community generally. There were other legal proceedings going forward, and there was the question of the liability of persons connected with the late management who may have taken moneys to which they were not entitled. Mr. Worcester then moved a resolution adopting the report, and tendering the best thanks of the shareholders to the committee of investigation. He cordially acknowledged the services of those gentlemen, and considered that the shareholders were very fortunate in having men of such high position to take up their affairs. Mr. Hoskins, one of the members of the old board, thought the thanks of the shareholders were due to the gentlemen who had instituted the investigation. He trusted that Mr. Swindlehurst and Dr. Baxter Langley would succeed in clearing themselves from the painful charge which had been brought against them. After alluding to the part which he himself had taken in the management, he expressed his sympathy with the position of his late friends, and trusted the new board would place the company's affairs on a safe foundation. After a few observations from the chairman as to his position as director, a shareholder thought the committee had not been sufficiently long in making their report. He trusted that Mr. Evelyn Ashley would be appointed to the chairmanship of the company. Mr. Samuel Morley, M.P., severely criticised the proceedings which had led to the prosecution which was now going forward, and said he was very glad indeed that it had been taken up by the Government. He would give all the assistance in his power to the board. Dr. Baxter Langley trusted the meeting would listen to a few words from him as an almost broken-hearted man. He had himself never sought any connection whatever with the company, nor would he have joined the board had it not been for the request of others. The amount he had received as director's fees was entirely invested in the company, and from time to time he had increased his holding. He asked whether it was likely that a man who was nearly sixty years of age, and who had lived so long with an honoured and respected name, would commit himself in a way which some persons thought he had. After a reference to the duties and services he had performed, he admitted that the company may have outgrown the capacity of some of those who were on the management, but he believed that was the worst charge which could be brought against them. He thought the board had adopted

a very cruel course, and the committee had deprived him of every farthing which he required for the purposes of his defence. The resolution was adopted, and after a discussion a sum of £300 was voted to Mr. Pearce for his services. The meeting was then adjourned for the appointment of two directors, and the names of Mr. T. Brassey, M.P., and Mr. J. G. Talbot, M.P., were proposed. The meeting separated after passing a vote of thanks to the chairman.

NOTES OF WORKS.

St. Patrick's new R. C. Church, Donegall-street, Belfast, which we illustrated and described in our issue of January 1st, 1875, was opened on Sunday last, 12th inst. It is in Romanesque style, and consists of nave, side aisles, transepts, sanctuary, side chapels, sacristies, &c., affording accommodation for about 2,000 persons. The design is by Mr. T. Hevey and Mr. M. H. Thompson, both of Belfast; and the contractors are Messrs. Collen Brothers, of Portadown and Dublin.

The new Royal Opera House, Derry, was opened on Friday evening last, 10th inst. It has been erected through the enterprise of the proprietor of the Belfast Theatre, Mr. J. F. Warden. The auditorium consists of pit, balcony, boxes, and gallery, and is calculated to seat some 1,500. The building is fitted up with all modern appliances. Mr. Phipps is the architect, and Messrs. McClelland, of Derry, contractors.

The works at the new Theatre Royal, Cork, from plans by the same architect, are progressing satisfactorily, and the building is expected to be opened next month.

DOINGS IN KINGSTOWN AND  
BLACKROCK.

KINGSTOWN.

At a late special meeting, a report was brought up of Mr. Cotton, C.E., relative to the state of the sewerage of the Kingstown township; and, also the resolution of the 19th of June, in respect to the borrowing of £5,000 in addition to the £8,000 already borrowed for the proposed Town Hall and Court House. The motion as to the Town Hall, &c., was negatived by a majority of two, it being considered that £8,000 was quite sufficient for the work. Mr. John M'Evoy in the course of some remarks said he was not opposed to the erection of the proposed building, but he would not support any measure entailing an expense of more than £8,000, and the tender which met the most favour by the Board gave no details, and they had no means of showing the Local Government Board that the work could be carried out for £12,000. He had never seen a more loose tender, or more latitude given to the contractor. There was nothing to protect them against extra charges on the work.

Mr. Cotton's report dealt in detail with every sewer, and reported generally that both for the requirements of the town and the efficiency of the works this sewerage was all that could be desired. Mr. Kelly said the report was most satisfactory, and moved that 2,000 copies of it be printed and copies sent to the ratepayers of the township, and also to the city and county members and the Local Enquiry Commissioners. This motion was carried.

BLACKROCK.

At the monthly meeting of the Blackrock Commissioners, an elaborate report was read from the "General Arrangement Committee" relative to the duties of the different officers and employes of the township. The committee suggested the re-arrangement of several officers, defining exactly what they should do, so as in future the responsibility attached to the different departments should be centered in the head of that department. The Committee also suggested several measures whereby certain expenses can be materially curtailed, and also that a sub-committee be appointed to enquire into the



present system of the lighting of the town, the number of lamps, the hours of lighting, and discontinuing. Also that the waste of gas is considerable, and can be efficiently curtailed, and in conclusion the Committee believed that if their suggestions be adopted the township would save fully £300 per annum. The report was unanimously adopted, and a gas committee formed.

Mr. J. J. Robinson handed in a notice of motion—"That for the future no more money be expended on the People's Park for the next two years, unless by the sanction of a special meeting of the board convened for the purpose."

The project of the People's Park at Blackrock, which at its first inception several years ago received our warmest advocacy, has been badly managed. It should long since have been a park in a flourishing condition, worthy of the township, and a pleasing and agreeable place of resort for townfolk and visitors.

### THE BRITISH ASSOCIATION.

The meetings of this body commenced to-day at Plymouth. This is the second visit paid by the association to this town since its start in the year 1820. We hope to print in succeeding issues some of the valuable papers read.

### THE LONDON MASONS' STRIKE.

A PARTIAL strike of the London masons has taken place, which has as its result the throwing out of work of a number of builders' labourers. On Saturday a council meeting in connexion with the masons' strike in London was held in Great Guildford-street, Southwark, when it was announced by the chairman that £50 had been voted towards the support of the labourers and their families who had been thrown out of employment through the masons' strike. Mr. P. Kenny, secretary of the General Labourers' Amalgamated Union, said that a very large number of labourers had been thrown out of work by the masons' strike. In order to prevent imposition by sham workmen, he had supplied trustworthy labourers who were engaged on new works in the metropolis with pocket-books, in order that they might enter every labourer's name who subscribed to the Strike Fund. The following letter was read by the secretary, in reply to one sent asking the Master Builders' Association "to consider and report to the General Labourers' Amalgamated Union their decision upon a resolution passed at a meeting in Trafalgar-square—'That this meeting of builders' labourers declare themselves to be the greatest sufferers by disputes arising between the skilled operatives and the employers, frequently resulting in 'lock-outs,' and we respectfully request the Associated Master Builders to consider the claims submitted to them by their skilled workmen, or submit the same to arbitration'":—

"Your letter of the 3rd inst. was laid before the committee of this association yesterday, when I was instructed to express to you the regret of the committee that the labourers, like themselves, should be suffering from the acts of a single body among their *employés*, and to assure you that the claims submitted to them by their skilled workmen have been most carefully considered.—C. GOULDEN, Secretary."

### LAW.

#### ACTION FOR ARCHITECT'S FEES. CIVIL BILL COURT.

*Robinson v. Duggan*.—The plaintiff, an architect, claimed £9 16s. as commission at 2½ per cent. on certain plans which he had prepared for alterations which defendant, one of the proprietors of the "Hammam," Upper Sackville-street, contemplated making at the time in his premises.

Mr. Ennis appeared for plaintiff, and Mr. J. O. Byrne, B.L., for defendant.

Defendant said plaintiff volunteered to prepare the plans, and that he distinctly told plaintiff he should do so on his own speculation, as he could not agree to pay him anything unless his partner, Dr.

Barter, approved of his plans. Dr. Barter objected to plaintiff's plans, and those of another architect were adopted.

Plaintiff denied that the plans were ever returned to him. He would not have sent in the estimates for his plans if they had not been first approved of. Defendant said he had not received any estimates from plaintiff. There was an understanding with all the other architects that they were not to be paid unless their plans were approved of.

Plaintiff said he had never worked on speculation, and never would.

The Recorder thought it was extremely unreasonable to ask five or six architects to engage in a competitive examination in this way.

Mr. Byrne said such was the custom.

The Recorder did not think it was the custom. He could not hold that plaintiff was to be kept dancing attendance on defendant, as it appeared he had, without being paid. However, there appeared to be a mutual misunderstanding, and he would grant a decree for £6.

### SANITARY AND OTHER NOTES.

A meeting of the Athy Sanitary Committee was held in the Court-house, on the 4th inst., Mr. H. Hannon in the chair. Mr. Crampton brought under the notice of the committee the manner in which the sewer in course of construction in Convent-lane was being built. He objected to the contractor building a 20-inch wall on a 4-inch foundation. He stated also that the covering flags were not of the proper thickness. The committee having proceeded to view the works, coincided with Mr. Crampton, and informed the contractor that he should adhere to the conditions of his specification. The contractor said he would comply with the directions of the committee. As there was only a short portion of the sewer built, the committee said they would not insist on its being taken up, but they directed that the remainder should be constructed in exact accordance with the specification, as pointed out by Mr. Crampton. The sub-sanitary officer was directed to exercise a careful supervision over the remainder of the work, and to supply each member of the sanitary committee with a copy of the specification.

**ATHY UNION.**—The Local Government Board forwarded a letter requesting to be informed what steps the guardians had taken towards carrying out the recommendations of Dr. W. F. Mara, sanitary officer, respecting the sewers of the workhouse and fever hospitals. The clerk informed the board that the recommendations were ordered to be carried out, and that they had advertised for tenders, but as yet they had not received any. At a subsequent stage of the proceedings the clerk read a tender for the work, which tender the guardians were of opinion was entirely too high, and was ordered to be laid aside. The clerk was directed to inform the Local Government Board of the facts of the case.

**THE PUBLIC HEALTH (IRELAND) BILL.**—This bill has been withdrawn for the present session. According to the statement of Sir M. H. Beach, the bill was mainly a consolidation one. Like the London "Public Health (Metropolitan) Bill," the Irish bill aimed at a good deal more than simple consolidation, and we have no doubt that several doctors and lawyers and others were very much interested in seeing it pass, and disappointed for the present. We would like to see the sanitary laws simplified and codified, but we are not advocates for undue centralization, or for a legion of hangers-on and expectants.

### HOME AND FOREIGN NOTES.

The Apprentice Boys' Memorial Hall, Derry, was inaugurated on Monday last.

The first stone of the new wing of the St. Vincent de Paul Orphanage, Glasnevin, has been laid by the Most Rev. Dr. McCabe.

**THE CORPORATION ACCOUNTS.**—"An abstract of the Accounts of the Receipts and Expenditure of the Corporation of Dublin for the year ended 31st August, 1876," appears in a morning journal of this date. We hope to give a digest of the interesting document in our next issue.

**ACCIDENT.**—On the 3rd inst., as two men in the employment of the Board of Works were engaged in repairing the quay wall at Balbriggan Pier, the triangle used for hoisting stones gave way and crushed them to death. Another workman who was near was severely injured.

**BRAY.**—Mr. Henry Brett, C.E., has been appointed Surveyor to the Bray Township, in room of Mr. Corbett, who has retired in consequence of continued ill health.

**CARLOW.**—Mr. John Bower, C.E., has resigned the office of County Surveyor for the County Carlow. In his official letter to the Lord Lieutenant, tendering his resignation, Mr. Bower says:—"The immediate cause of this step on my part is a resolution passed unanimously by the grand jury of that county, amounting to a vote of censure, on my absence in obedience to a Speaker's warrant of the House of Commons, requiring my attendance as a witness before a committee of that House on the Belfast, Holywood, and Bangor Extension Railway Bill."

**"STOOPING TO CONQUER."**—Mr. John Byrne, T.C., has resigned his seat as guardian of the South Dublin Union, preparatory to his becoming a candidate for the office of Clerk of the Union. Why should people wonder at this? The transformation scene has often been performed by others as well as Mr. Byrne. A late T.C. resigned his seat to become a paid official of the Corporation. Let the Town Clerk look out. We know an instance of a Town Clerk in the distance, who before he became one, started a local newspaper to work up for the place, which he did bravely. For several months he "pitched in antagonistically" to members and paid officials for their high crimes and misdemeanors! He became a dangerous weapon, so an opportunity was at last created, and his silence secured by allowing him to walk in as Town Clerk of—mum!

**"ROOTING AT THE FOUNDATIONS."**—At a meeting of the "National Discount Company of Ireland (Limited)," the chairman, Mr. James H. Owen, Architect, R.H.A., is reported to have said during the course of his remarks:—"It had been a very great pleasure and satisfaction to them that they had been able to hold their meeting in their new concerns. The works were unfortunately very protracted, as they involved a great deal of troublesome labour in rooting at the foundations of a very old house, and interference with one's neighbour, and alleged damage to the adjoining premises, and consequent threats of legal proceedings—which his friend, Dr. Waller, had suggested was the most unpleasant business that any company could be engaged in." Rooting at the foundations of a very old house is certainly not a very pleasant form of labour. Is "rooting" a technical term in architecture or building? We opine not. Pigs, particularly Irish ones, with rings or not in their snouts, are fond of rooting at the foundations of houses—potato pits and other natural and artificial objects. The "boneens" see the wind to be sure, though they are unacquainted with the power of raising that element.

**A MODEL DIRECTOR.**—The doings of the special meeting of the Artisans' Dwellings Company on Friday were decidedly of a sombre, and at one moment, perhaps, even melancholy character. It is impossible, however, to read the account of what was said by the various speakers without distinguishing the comic element pervading the proceedings. The situation of this ill-starred, but once well-meaning company, is so well known as not to need any explanation. It is the old story of a board who are partly unable, and partly, perhaps, unwilling to discharge their proper functions. The policy which they professed may be pretty easily understood by a reference to the reports which have appeared of their accounts. But the shareholders were afforded the opportunity of hearing from the lips of one of the ex-directors themselves a statement of the mode in which he, and perhaps some of his colleagues, were accustomed to attend to their business. This gentleman, a Mr. Hoskins, who thought fit to describe himself as an "ornamental" director, gave an outline of the duties which he regarded as appertaining to such a functionary. He "got what capital he could from his friends"—that is to say, induced those unfortunates to go blindfold into a speculation of which he knew nothing at all; he praised the administration of the company, of which he was equally ignorant; he "distributed prizes for floral culture, and presided at gatherings on the estates." Besides this, he "occasionally attended board meetings," and even at times aspired to "criticise" the administration of which he had such high opinion. But above and beyond all other things he thought it his duty to have a perfect confidence in the integrity and capacity of his colleagues. If a director had not such golden ideas, it was his duty—not to denounce the suspected persons, but to resign his seat. These are the ideas which not only this curious specimen of a director, but doubtless some others in a minor degree, were quite comfortable in professing. Such companies as these started with philanthropic intentions, are often joined by mere philanthropists, knowing, like Mr. Hoskins, nothing whatever of business, and capable of being hoodwinked to any extent; and it is time that the nomination of such persons to any position of trust should forthwith and finally be discontinued.—*Globe*.



**DUBLIN TRAMWAYS COMPANY.**—The *Dublin Gazette* of last night contains an Order of the Lord Lieutenant and Privy Council authorising the construction of a junction line between Nelson's Pillar and the existing line at Lower Gardiner-street. The following restrictions are imposed:—Every tramcar and other vehicle and carriage travelling upon the said tramway shall be driven and proceed at a walking pace only when passing in either direction over the said tramway between the point in Lower Sackville-street, from which the said tramway commences, and a point in North Earlstreet eastward and completely clear of the crossing for foot passengers at the west end of North Earlstreet; and no tramcar or other vehicle intended for the carriage of passengers for hire, travelling in either direction over or upon the said tramway, shall be stopped or permitted to stop for the purpose of taking up or setting down any such passenger or passengers upon any part or at any point of the said tramway between the point nearest to the south-eastern corner of Nelson's Pillar and a point in Talbot-street eastward and completely clear of the east end of North Earlstreet."

**BIRKBECK BUILDING SOCIETY.**—The 26th annual meeting of the Birkbeck Building Society was held on Thursday (at the Birkbeck Literary and Scientific Institution, London). The report which was presented to the meeting stated that the receipts for the year were £6,129,128, and the total from the commencement of the society £33,416,513. Notwithstanding the reduction of interest to 3½ and 2½ per cent., the deposits had risen from £1,929,965 to £2,129,820, or an increase of £190,857. The gross profits earned by the society during the year were £106,017, upwards of £9,000 in excess of the previous year. Of this amount £83,230 has been appropriated to the payment of interest, discount, and expenses of management, leaving a net balance on the year's working of £22,787. The surplus funds amounted last year to £1,365,061, of which £1,220,386 was invested in Government, Indian, and metropolitan stocks, City of London and colonial bonds, gas and water stocks and shares, freehold ground rents, and other readily convertible securities, and £144,674 remained at call in the hands of the bankers. At the present time the amount invested in convertible securities is £1,575,706, being an increase of £355,320, while the sum of £170,742 stands to the credit of the society at the bankers, being £26,068 more than last year. The total increase of the surplus funds is £381,387. The proportion of reserve to liabilities is now upwards of 77½ per cent. The total liabilities of the society are £2,263,719, and the assets £2,348,603, showing a net surplus of £84,884. Of this sum £33,750 is invested in consols as a permanent guarantee fund, leaving £51,134 to be carried forward. The number of investors and depositors at the close of the year was 38,427, being an increase of 2,525 since the last balance.—*Times Money Article.*

**AMERICAN SLATES.**—Systems of business (says the *Timber Trades Journal*) are subject to the same changes that pervade all human institutions, and though not quite so fluctuating as the fashions, the present age always considers its methods a great improvement on the last. Among the novelties of the day in connection with our trade may be mentioned the selling foreign slates by auction in the London market, as was done by Messrs. George Guy and Co. at the Baltic on Wednesday, in connection with Messrs. Foy, Morgan, and Co.'s timber sale of the same date and place. This trade, though not entirely new, is only beginning to develop itself, and there seems every likelihood that at no distant date it will assume very considerable proportions; for though at first sight it seems an absurdity that America should be any better able to supply our markets with slates than with coals, yet the cases when looked into are not parallel. Of coal we have plenty and to spare, always ready, and it is shipped with ease and despatch to any part of the world from a variety of our ports east and west; but the slate quarries at Bangor are a sort of monopoly, long detention is frequently experienced before a vessel going there to load can get a cargo, and the demand is so much in excess of the supply, that orders have to be in hand for months before there is any certainty of their being executed. The difficulties that those engaged in the retail slate trade had to contend with, which we have glanced at, originated the idea of utilizing the American quarries; hence the recent importations which seem to meet with favour among the trade on this side. These slates were sold by sample, they stood the test, and were of good colour. We believe they are sufficiently sound to answer all the purposes our own are used for, and make a perfect roof quite as well. There is no doubt but their introduction will send a great many timber merchants into the slate trade who have been impatient of the delays in connection

with this branch at home, and very possibly a more profitable business may be made out of these slates than in Michigan deals or pitch pine timber.

**STRASBURG CATHEDRAL.**—The restoration of Strasburg Cathedral is reported to be making satisfactory progress, and to be now approaching completion. Fourteen statues of German emperors and kings, from King Pepin down to Emperor Henry IV., are to be added to the sculptural embellishments of the fabric.

**DEATH OF AN ARCHÆOLOGIST.**—The death of a well-known archæologist, the Rev. Charles Boutell, is announced in the *Athenæum*. Mr. Boutell was educated at St. John's College, Cambridge, and took his B.A. degree in 1834. He was shortly afterwards incorporated at Trinity College, Oxford. He first made himself known as an antiquary by his works on brasses ("Monumental Brasses and Slabs," 1847, and "Monumental Brasses of England and Wales," 1849). These were followed by his "Manual of British Archæology," and his most successful book, "Heraldry, Historical and Popular." In 1867 he published a more popular treatise—"English Heraldry," and in 1869, "Arms and Armour."

**THE PARIS EXHIBITION OF 1878.**—The Italian Government (says the *Academy*) are taking active measures in order to ensure that Italy shall be worthily represented at the Paris Exhibition next year. All the most distinguished of the Italian artists have been officially invited to send in a work especially prepared for the Exhibition, independently of the royal commission which determines on the admission of other works of art. The authors of works sent to the Naples Exhibition have also been invited to send the same to Paris.

## TO CORRESPONDENTS.

**APOLOGIA.**—Some of our correspondents must excuse us for a seeming neglect of their communications. What is really useful we will utilise; but pressure of literary matter obliges us to hold over several communications.

**BOOKS.**—From the above cause notices of some works are also held over.

**FLY.**—We have not learned if a day has been fixed for the discussion of the "Colorado Beetle" question by the City Fathers.

## NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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## Illustration.

THURLES ROMAN CATHOLIC CATHEDRAL.

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## THE IRISH BUILDER.

VOL. XIX.—No. 425.

AN UNEXTINGUISHABLE  
ARCHITECTURAL CONTROVERSY.\*

## FIRST NOTICE.

**S**EVERAL hundred years is a long period for one question to occupy the national mind, and supply historians and antiquaries of all kinds food for thought and the wildest of speculations. Mere chroniclers and annalists for a few hundred years having had their say, ecclesiastical and civil historians took up the fascinating question, these giving way in turn to professional antiquaries of the old school and to artists.

It is only within the present century, and that somewhat late, that architects thought it worth their while to enter upon the controversy, after a personal examination of some of the debated buildings. Practically speaking, at the present time, the Round Tower controversy appears to be falling gradually into the hands of professional men more capable of giving it a practical consideration, though it must be acknowledged of late some native ecclesiastics have contributed creditably from their point of view, to the literature of the still entrancing subject.

Mr. Henry O'Neill, following up a promise made in one of his previous works, has boldly once more re-opened the controversy, with a view, of course, like others of his predecessors, of finally settling the question once and for ever, and putting an end to all further doubts. In this "Part the First" we have brief though, perhaps, ample enough descriptions of the four Round Towers in the County Dublin—Clondalkin, Lusk, Rathmichael, and Swords. Three of these towers are at present in good preservation, but Rathmichael is only a mere stump about 6 ft. high. Following the descriptions of the four towers in the present instalment of his work, Mr. O'Neill gives us a section devoted to "Irish Antiquities" in four chapters,—the Rise of Antiquarian Investigations; Irish History; Independent Ireland; and the Clan System.

Leaving these subjects for the present, we will return to notice the preface of the work, which is certainly somewhat remarkable from the statements made by the author in regard to the late Mr. Petrie's work on the Round Towers, and also in respect to the action of the Royal Irish Academy. We are not called upon to endorse all that our late eminent antiquary has written; indeed we have taken exception more than once to several of his statements, while, at the same time, acknowledging the service he rendered to his country. Neither are we called upon to defend past or present councils of the Royal Irish Academy. There is some hard hitting in Mr. O'Neill's preface, and as he has the courage, or, as some may say, the audacity to express unpopular opinions, as reviewers we will show fair play in reproducing them. After citing, in the opening of his preface, the introductory words from the introduction of Mr. Petrie's essay, why so many writers have failed in their task to explain the origin and uses of the Round Towers, Mr. O'Neill adds another cause of failure to those advanced by Petrie, and states it in these words:—

"To these causes of failure I may add that when some Irish antiquaries had the facts as plainly as possible before their eyes, the facts have been misstated; for instance: In the Royal Irish Academy Museum there is a fine specimen of ancient Irish decorated metal work called the Cross of Cong; on it are several inscriptions in Irish letters; these have been published by the Academy in its 'Proceedings;' the published inscriptions are also in Irish letters, and with the usual inverted commas which imply literal quotations, as if they were transcripts, letter for letter, from the originals. These originals are as legible as a printed book, yet the transcriber states that a part of them is defaced; there are nearly a dozen errors in the transcriptions. These facts are the more surprising because the original Cross of Cong is in the Royal Irish Academy, and a mere schoolboy could avoid the errors; yet this great association of some hundreds of the most intellectual gentlemen in Ireland allowed such mistakes to be published under their sanction."

The blunders in transcribing these inscriptions are credited to Dr. Petrie, and others are indicated of a like kind.

At this point it may be necessary to remind Mr. O'Neill that the Royal Irish Academy for long years took care, by certain instructions, to make it known "That the Academy, as a body, is not answerable for any opinion, representation of facts, or train of reasoning in any of the articles appearing in its Transactions, or otherwise emanating from the Academy, as the authors of the respective essays are alone responsible for them." The Academy from time to time gave prizes for works of merit under the above conditions; but whether the conditions which we have adduced cover the whole of the question, we will let others determine. There are sanctions and qualified sanctions. Certainly if the council were aware that a number of deliberate misstatements were made in any paper about to appear in their Transactions, we should think it would be their duty to withhold their sanction by preventing its publication.

Mr. O'Neill alludes to the prizes given in 1827 and the following year to John Dalton and Miss Beaufort, the theory advanced being that of fire worship, and the alleged facts on which the theory was based being that the doorways of the towers always face the east, and that there are four windows to the top loft—these windows looking respectively to the four cardinal points. "The theory of the towers being built for fire worshipping purposes," says Mr. O'Neill, "is inconsistent with facts. The statement that the doors face the east is a fiction, so

also is that respecting the four windows at the top." He thinks it is easy to see how these fictitious statements originated:—

"There are four towers in the County Dublin, not far from the capital; one of them is only a stump without any openings. But the other three have the doors facing the east, or nearly so, and four openings to the top floor, which face the cardinal points. The writers of the two prize essays I have mentioned, very possibly, saw the County Dublin towers, and at once concluded that the agreement in respect of doors, &c., was common to all the towers in Ireland, thus committing the serious blunder of drawing a general conclusion too hastily."

Mr. O'Neill goes on to notice some towers, and to state that there is no common agreement in the aspect of the doorways, and there is no rule as to the number of windows, although four is usual. He points out also that Dr. Petrie notices the errors as to the aspects of the doorways, and the number of windows at the tops of the towers at page 34 of his essay, although the doctor is said to be himself in error in his statement respecting the aspect of the doorways. The unsuitableness of the towers for fire worship was also noticed by Petrie. In the same year that Dalton got his prize, we are told that Petrie became a member of the Academy, and in the succeeding year was elected to the council, and soon after made a member for life. In respect to the surroundings of the work undertaken by Petrie, and the action thereon by the Academy, Mr. O'Neill is inclined to be minute. He writes:—

"Although the Royal Irish Academy had given prizes and medals for the essays of Beaufort and Dalton; yet Petrie himself got the council to offer a third prize on the following conditions, which were penned by this eminent archæologist. I extract them from the preface to Henry O'Brien's 'Round Towers of Ireland,' that being the only authority I have been able to discover. The offer of the R.I.A. was: 'A premium of fifty pounds and a gold medal to the author of an approved essay on the Round Towers of Ireland, in which it is expected that the characteristic architectural peculiarities belonging to all these ancient buildings now remaining shall be noticed, and the uncertainty in which their origin and use are involved be satisfactorily removed.' It seems that the original advertisement appeared in December, 1830, but as there was no applicant, a second advertisement was issued, which is dated 21st February, 1832, the time appointed for sending in the essays being the 10th of June, little more than three months, for traversing Ireland in search of round towers, examining their architectural peculiarities—making drawings necessarily included,—hunting up the facts to remove the uncertainty in which their origin and use are involved, putting all the materials in order, and preparing an essay to be read before the collected wisdom of the Royal Irish Academy. Such a feat was impossible."

Mr. O'Neill, apart from any animus he may have against persons or public bodies in particular, is quite right in saying that under the conditions stated, the feat of performing the projected work in a satisfactory manner was impossible. If Petrie paved the way for the Academy offering a third prize, and in doing so had a dishonourable object in view, his conduct would deserve censure. A good deal might be imagined, but we have no right to insinuate. At the time, however, no one was seemingly better prepared than Petrie for the three months' work, for he was an artist of merit, and had even at that time made several sketching and antiquarian tours through the country. He could count also on the assistance of his friend John O'Donovan in kindred directions, and others of his early literary friends and co-labourers, some of whom rallied to his assistance in the columns of the *Dublin Penny Journal*. In a word, George Petrie had advantages superior to any one likely at the time to compete with him for the prize. But let us

\* "The Round Towers of Ireland. By Henry O'Neill, author of 'The Sculptured Crosses of Ancient Ireland,' 'The Fine Arts and Civilization of Ancient Ireland,' &c. Part First." Dublin: M. H. Gill and Son. London: B. Quaritch; Simpkin, Marshall, and Co. Edinburgh: Menzies and Co. 1877.



hear Mr. O'Neill further anent this subject:—

"It was not without good reason that Dr. Petrie proposed the round tower subject anew. Beaufort and Dalton, and very many other theorists, had been writing about these mysterious structures; they had done so without a proper knowledge of the towers, or seemingly adequate mental capabilities for constructing a rational argument about them. Falsehoods instead of facts, bold and baseless assertions instead of sound reasoning, form the staple of these theorists. Petrie laid down the proper conditions almost completely; the important omission was the local position of each tower, as on hill or eminence, in a valley or low position, on an island; also its position respecting the church, and how far from it; these are important facts as regards some theories. Another series of facts is the measurements—the size of each tower and of each opening, the compass bearing of each opening, and the forms of these openings.

"It need hardly be said that the three months allowed for traversing Ireland, examining sixty round towers, and so on, failed to produce competitors; not to weary with details, Petrie came forward with a manuscript of about twenty pages. Henry O'Brien, who knew nothing of the first advertisement, sent his essay, a work, the production of which, it seems, cost him his reason; but before becoming an inmate of the lunatic asylum at Hanwell [in Middlesex], he had enough sense left to violently grumble at the prize being given to Petrie for his twenty pages of manuscript, and so the Academy gave him a prize also, and thus, so far, the unpleasant matter ended; not, however, without O'Brien charging the Academy with 'jobbery,' for which, I dare say, there was sufficient reason.

"That Petrie was not prepared, his manuscript of only twenty pages is sufficient proof; and as it took him from 1833 to 1845, a period of twelve years, to get up the book he has published, and, as he states in that book, that a second volume will be necessary to complete his proofs (though the first volume contains above 400 pages), we may see how great was the task for the accomplishment of which only a few months were allowed by the advertisement of the Royal Irish Academy.

"Yet Petrie has not accomplished the conditions laid down in his own advertisement. Instead of an essay on the towers, he has given a very able and valuable work on the ecclesiastical architecture of Ireland anterior to the Anglo-Norman invasion. He also states that his prize essay on the towers is contained in the book, but that many proofs of the first importance will be given in a second volume. This promised volume he never published, although this learned antiquary lived for above thirty years after gaining the prize, and had health, leisure, and a government pension to enable him to fulfil his self-imposed task, but he preferred devoting his versatile powers to music, and so we have to regret that the indispensable proofs have never appeared."

Mr. O'Neill and others at the present time are not the only persons who have regretted that Dr. Petrie never published his promised volume. In a long and appreciative review of Dr. Petrie's work in the April number of the *Dublin University Magazine* for 1845, the year of the publication of his book, the reviewer observes:—

"The anxiety of the public to be acquainted with the solution of the original question has latterly manifested itself in a degree of importance, which, however unreasonable on the part of any one unacquainted with the vastly enlarged scope of the work, cannot be wondered at in those who are unaware of the extent of the additional inquiry, or incompetent to judge on its curiosity or value. And independent of the repeated demonstrations of this feeling, Mr. Petrie has, no doubt, been urged into publishing his work in its present form, by the disingenuous use made of his original essay, which necessarily became known to a number of individuals, on being perused by the then members of the Academic Council, to whom it was referred for judgment, with other competing papers, and which has been made subject of various anticipating essays and comments, some designed to depreciate the value, and others to forestall the use and application of its materials. These petty larceny annoyances are, however, the natural attendants on every great work of originality, conversant with numerous details, and the fame which precedes its publication; and while we give Mr. Petrie credit for exhibiting the tranquillity of conscious learning through a series of, we believe, unexampled misrepresentations and taunts, anticipating refutations, and thefts, we cannot but regret that he has not borne these provocations a little longer, so as to have given his

labours to the world of learning complete; for till the appearance of the third part, which, we suppose, we cannot expect for at least another year, we must remain with our interest excited, to a much greater degree than ever it was on the subject of these towers, regarding a variety of other topics which will doubtless in the meantime, to make the subject of as much rash speculations, and presumptuous dogmatism as the towers themselves."

We would like to know who was the writer of the review from which we have quoted. Read in connection with Mr. O'Neill's statements the extract will have its value now, even though upwards of thirty years have passed since it was written. The review in the *Dublin University Magazine*, as a whole, endorses Dr. Petrie's theories; but, in what we have quoted and what we may hereafter quote, it will be seen that the publication of Dr. Petrie's work gave rise to similar utterances to those that we find expressed in the preface of Mr. O'Neill's book.

### THE CAXTON CELEBRATION.

THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

#### FIFTH PART.

THE history of the Irish newspaper Press is full of vicissitudes, and even the most prominent and longest-lived of our journals have had stormy careers. Many of them which were once powerful, popular, and influential, declined in public favour, despite of the greatest exertions of their proprietors, and were forced to give way to new aspirants, who, again, after dictating and leading opinion for many years, had also to give way to newcomers. Short-lived newspapers in the eighteenth century were many in Dublin, both in the first and latter half. Until quite recently we had in this city three regular newspapers long past their hundredth year. Indeed one of them, a short time deceased—the *Dublin Evening Post*,—dated from 1725; next *Saunders's News-Letter*, 1745; and the *Freeman's Journal*, 1763. The *Dublin Gazette* of course dates from 1711, or perhaps a short time previous; but it is not, strictly speaking, a newspaper, being mostly confined to government, parliamentary, and legal notices.

A brief account of the establishment and career of *Saunders* will not be without interest. It was first known as *Esdall's News-Letter*, from its original founder, who was an apprentice of George Faulkener. Shortly after the establishment of the *News-Letter* in 1745, Esdall became the publisher also of a Saturday paper entitled the *Censor*, or the *Citizen's Journal*. This organ was edited by the celebrated Charles Lucas, and we read that several numbers of it were condemned by the Irish House of Commons as "highly and unjustly reflecting on the King, Lord Lieutenant, and parliament, justifying the bloody and barbarous rebellion in this kingdom, and tending to create a jealousy between the kingdoms of Great Britain and Ireland, and to disunite the affection of his Majesty's common subjects closely connected by the same civil and religious interests." In consequence of this condemnation, Esdall was obliged to secrete himself for some time, to escape being punished; but his wife had to put in an appearance, and compelled to declare the name of the writer of the obnoxious paragraph published in the *News-Letter*. Poor Esdall was involved in a series of troubles consequent on publishing the productions of Lucas, and suffered severely in pocket and position.

In 1755, after the death of Esdall, the paper became the property of Henry Saunders, who had been in Esdall's employ; and from its new proprietor it received the name which it retains to the present. Henry Saunders, as a printer and bookseller, lived in Christchurch-lane previous to Esdall's death, and subsequently at the sign of the "Salmon" in Castle-street. We find him about the year 1773 at 20 Great Ship-street, where he died a

sheriff's peer in 1788, as appears by our old directories.

The *News-Letter*, after Saunders's retirement, passed into the hands of James Potts, who, like Esdall, had also been an apprentice of Faulkener's. At the sign of "Swift's Head" in Dame-street, in 1766, James Potts published a paper entitled the *Dublin Courier*, issued on Tuesdays and Saturdays; and in 1771 he issued the first number of a once popular monthly periodical entitled the *Hibernian Magazine*, but subsequently more generally known under the title of *Walker's Hibernian Magazine*, from its subsequent proprietor, Thomas Walker, who published at "Cicero's Head," 79 Dame-street. Thomas Walker was succeeded by Joseph Walker as publisher, who died in 1805. Sets of *Walker's Hibernian Magazine* are now becoming scarce, and sought after on account of their usefulness as references for illustrations of Dublin society and Irish life in various ways in the last century and early in the present.

*Saunders's News-Letter* was originally published three times a-week, and contained twelve columns, but it was afterwards enlarged to sixteen, selling for a penny. In 1777 the *News-Letter* was issued as a daily paper, and in 1791 James Potts was ordered into custody, for publishing in his paper an advertisement which was declared a gross violation of the privileges of the House of Commons. "Sometime after this," says Mr. Gilbert, in his "History of Dublin," "Giffard, the editor of the *Dublin Journal*, commenced to assail Potts under the name of 'Jacobin,' and accused his paper of disseminating seditious principles. A paragraph reflecting on the 'Dog in Office' having appeared in *Saunders's News-Letter* on Saturday, October 18th, 1794, Giffard, Ex-Sheriff of Dublin, and his son Harding, afterwards Chief Justice of Ceylon, assaulted and horsewhipped Potts on the following day, while officiating as churchwarden of Taney, County Dublin. Although the punsters asserted that it was natural for 'the Dog to lick Potts,' Giffard was brought to trial before Baron Smith in July, 1795, condemned to suffer four months imprisonment, and to pay a fine of five marks. This sentence was remitted by the Lord Lieutenant on condition of his paying twenty pounds to the poor of Taney, twenty pounds to those of Stillorgan, and ten pounds to the Four Courts Marshalsea." James Potts died in 1796, and his successor, John Potts, in the following year came into contact with the authorities for too plain speaking. He was committed to the Sergeant at Arms, and reprimanded by the Speaker for publishing an obnoxious article. An apprentice of James Potts, Andrew Cherry—afterwards known as a respectable actor and dramatic author—quitted his master's employment for the stage in 1779, making his first appearance as an amateur one in the character of Lucia in "Cato," in a room at the "Blackamoor's Head" in this city. Cherry's *début* as a professional actor was made afterwards at Naas. He died in 1812 in Wales, previously passing through many vicissitudes, from a strolling actor to that of a manager of a theatrical company.

*Saunders's News-Letter* continued from the last century until a couple of years ago, say a period of upwards of a hundred years, in the possession of the one family. It was once the chief daily advertisement medium in this city, and for long years in the present century it was a journal without "leading articles" of its own, the articles of the principal morning journals or extracts from them being in lieu. Its make-up otherwise was confined to news, reports of meetings, and advertisements. It is not our purpose to write particularly at present of *Saunders*, in late years under the last representative of the Potts family. Since that representative retired from it recently, it has passed through the hands of three proprietors in a short time. It is now a journal with "leading articles," if not a leading journal; but, as far as our wishes go for sake of old memories, we wish "old *Saunders*" a renewed lease of life and pristine vigour.



The names of Peter Wilson and his son are honourably and long and creditably connected with the printing and publishing trade of this city, through their works and the novelty and enterprise exhibited in their publications. Before his appearance in Dame-street, about 1747, as a successor to Phillip Crampton, publisher, at the corner of Castle-lane, at "Addison's Head," Wilson resided near Fownes-street, at the sign of "Gay's Head." In 1762, Wilson published the first original monthly magazine of its kind in Ireland. It continued for two years, and comprised original articles, verse and prose, accompanied with engravings executed by G. Byrne, a native artist. As early as 1749, Wilson, with his apprentice, Watts, appears to have been summoned before the House of Commons for having printed certain papers relative to the dispute with Charles Lucas. In 1764, he appears again in conflict with the authorities for publishing in his *Dublin Magazine* a paragraph reflecting on Sir Arthur Brook, one of the members of the Commons. He was committed to Newgate, but on making an humble apology, he was released in the following month.

The most notable of Wilson's literary enterprises was the issue of a Dublin Directory, the first known attempt of the kind in this kingdom. This little threepenny pamphlet containing a very limited list of merchants and traders, was issued by him in 1752. A second edition was also issued of this Directory in an enlarged form at sixpence. The circulation, however, was so small that it did not cover the cost of printing and paper. Mr. Gilbert brings together several interesting particulars in connection with this enterprise so creditable to Wilson. The result of Wilson's first attempt was, we are told, so discouraging that he for a time abandoned the undertaking; but owing to the practical sympathy of two respectable Dublin merchants, Messrs. Pim and Pike, who rallied round Wilson, and solicited shilling subscriptions, he was encouraged to renew his effort.

In 1755 Wilson issued a new and much enlarged edition, appending an engraved plan of the city. Henceforth the Dublin Directory till the present day has been continued without interruption, yearly growing larger and larger until it became a gigantic volume in the hands of Mr. Alexander Thom in our own day. In 1771, Peter Wilson, through declining health, resigned his business to his son, who carried it on till 1781, when circumstances brought his creditors down upon him, who, believing that the copyright of the directory belonged to him, disposed of it by auction. The elder and original compiler instituted immediate proceedings, and the sale was set aside, and the copyright declared the sole property of its founder, Peter Wilson, senior. From this time until 1801 the son continued to publish the Directory, "when," to use the words of his father, "death put an end to one, who, it must be acknowledged, was possessed of a spirit beyond his income, and abilities superior to the common ranks of tradesmen,—witness his 'Post Chaise Companion,' his new 'Plan of Dublin,' and his 'Travelling Pocket Map of the Roads of Ireland.'"

Peter Wilson died in 1802, at the advanced age of 82, at 7 Glasnevin-road, opposite Phibsborough, and his activity was evidenced in superintending the issue for that year. He bequeathed the copyright of the publication to his daughter and grandson, from whom it was purchased by William Corbet, printer, of 58 Great Britain-street.

The "Travelling Pocket Map of the Roads" accompanying the "Post Chaise Companion" was a very useful one in stage-coach days, and the "Companion" independently was a good guide as to mileage and direction; besides, it acted as a sort of Topographical Hibernica. Lewis in his "Topographical Dictionary" improved upon Wilson in one sense; but, apart from alphabetical arrangement, Lewis imitated Wilson by describing not only ancient objects of interest in different places, but in particularising noblemen's

and gentlemen's seats, for the purpose of swelling his list of subscribers. The Plan of Dublin annexed to early issues of the Directory "Printed for William Wilson, No. 6 Dame-street," was drawn by Samuel Byron, the City Surveyor. A copy of Wilson's Directory for 1786 before us gives the names Christopher Byron, card-maker, and Samuel Byron, land and city surveyor, both residing at 13 Eustace-street. Coming on ten years later we find the Directory printed by instead of for William Watson, 6 Exchange-court. We also find this announcement in the Directory of the last-named year (1796):—"The subscribers of the third edition of the 'Post Chaise Companion or Travellers' Directory through Ireland' are respectfully informed that the work is now getting forward with all possible expedition, the new map of Ireland and several of the plates being already finished in a style of excellence, for correctness and effect, that I hope will meet the general approbation of an indulgent public."—Wm. Wilson.

Samuel Byron appears to have died between 1786-1796, for his name is no longer in connection with the plan of the city in the Directory, and 13 Eustace-street echoes neither his name nor Christopher's; but card-making is still represented at 13 Eustace-street in the person of Mary Byron. The writer has a suspicion that the City Surveyor's proper name was Byrne, and that he Anglicised it, like many more of his countrymen.

Philip Crampton was a noted and wealthy bookseller in Dublin in the first half of the eighteenth century, and, subsequently, filled some public offices after retiring from business, in which he was succeeded, as we have already stated, by Peter Wilson in Dame-street.

The Corporation of Stationers (represented in the Guild of Cutlers in the old municipal body) presented Alderman Crampton, in 1755, with a large silver cup, as an acknowledgment of the honour done them by his vigilance as sheriff in suppressing gambling-bouses and ball-yards in the city. This was at a period when, owing to the riots in Dublin, it was found necessary to post guards of horse and foot in different parts of the town and suburbs. Crampton, who was elected Lord Mayor in 1758, lived on until 1792, when he died in Grafton-street, at the very advanced age of 92 years,—the oldest of the City Fathers, i.e., the "Father of the City." Looking back we find that he lived through a long and stormy period since his birth in 1696, witnessing the rise of the newspaper Press in this city, and the early progress of the regular printing and publishing trade. When Crampton retired from the pursuit of his profession in 1747, he was still a comparatively young man of 51 years, to which he added of public life afterwards nearly half a century. Had Philip Crampton lived but four years longer, his centenary would have presented the instance of a remarkable Dublin bookseller whose life belonged to three distinct centuries. The name of the veteran bookseller is still retained in the name of Crampton-court.

"On the northern extremity of Dame-street" writes Mr. Gilbert, "opposite to Castle-lane, was the station of the Horse Guard of Dublin, for which the government in the reign of Charles II. paid John Crow, Esq., an annual rent of £110. On the removal of the military in the early part of the eighteenth century, this locality became the property of Philip Crampton, a wealthy bookseller, who continued to reside in it for many years after he had retired from business." At his house when in business at the "Addison Head" before mentioned, the "First Fruits" office was held till 1745. Several noted booksellers and publishers in Dublin in the last century retired wealthy as well as Crampton, and filled municipal offices afterwards. Some of them, however, like the famous Luke White, added to their bookselling trade that of book auctioneer and lottery office keeper.

Of music publishers, the most noted in

Dublin about the middle of the last century and for some years subsequently was Benjamin Rhames. His shop was at the sign of the "Sun" on the upper Blind-quay. This locality was altered in name at the request of a number of the inhabitants, the upper and lower quays, or "keys," as they were sometimes written, becoming respectively Upper and Lower Exchange streets. Benjamin Rhames's widow appears to have carried on business for several years after his death, for her name appears in the two last decades of the eighteenth century in Wilson's Directory—"Elizabeth Rhames, musicseller and haberdasher, 16 Exchange-street." Robert Rhames, a printer, about the same time was established for some years at 6 Marlborough-street. He was probably the son of the aforesaid Benjamin, as in 1796 there are no other persons of the name mentioned in our directories, save Elizabeth, the widow, and Robert, already mentioned.

Of other music publishers and music sellers of note before the close of the eighteenth century were John Lee, at 70 Dame-street, and Samuel Lee, subsequently Edmond Lee, of the same family, was a harpsichord and pianoforte maker at 2 Dame-street. All the Lee family of Dame-street appear to be connected in one form or another with music publishing and selling and musical instrument making, and the trade continued for several years in their hands and that of their direct successors in the same business establishments.

#### THE BRITISH ASSOCIATION.

On the date of our last issue the proceedings of the forty-seventh meeting of the British Association for the Advancement of Science were opened at Plymouth by the address of the President, Professor Allen Thomson. The subject chosen was "The Development of the Forms of Animal Life." The subject, though a very interesting one, and ably handled as a whole, even if we had room, is unsuitable for reproduction in our columns. A brief extract from the professor's very lengthy and elaborate address will not be amiss, as it touches upon subjects allied to sanitary science. With regard to the origin of life, the President adopted the view that "it had been experimentally demonstrated that no development of organisms, even of the most simple kind, has been satisfactorily observed to occur in circumstances which entirely excluded the possibility of their being descended from germs, or equivalent formative particles, belonging to pre-existing bodies of a similar kind. The reflection forces itself upon us that we are just as ignorant of the mode of first origin of all the compounds of the inorganic elements as we are of that of living matter; and we may therefore be excused if we suspend all theory and conjecture until we shall be guided to more reliable hypotheses through the plain track of observation and experiment. But the practical applications of the increased knowledge of the origin of minute animal and vegetable organisms are very numerous. It is now proved beyond doubt that the origin of putrefaction and fermentation is dependent on the presence in the substances which are the seat of the change in these processes, or in the surrounding air, of the germs of minute organisms of an animal or vegetable nature, and that the maintenance of the chemical changes in which these processes mainly consist is coincident with and casually (if not essentially) dependent upon the growth and multiplication of these organisms. Professor Lister had the merit of being the first to apply the germ theory of putrefaction to explain the formation of putrid matters in the living body, and he has founded on this theory the now well-known antiseptic treatment of wounds, the importance of which it would be difficult to over-estimate. The success or failure of plans for the preservation of meat and other articles of food without question depends on the possibility of the complete exclusion of the germs which are the cause of putrefaction and fermentation; and their



management must therefore be founded on the most accurate knowledge of these organisms, and the circumstances influencing the persistence of their vitality and the vigour of their growth. The theory of Biogenesis has also lately been the guide in the investigation of the causes of various forms of disease, both in the lower animals and in man, with the result of showing that in many of them the infective substance consists, in all probability, of germs of minute animal or vegetable organisms. There is very great probability, indeed, that all the zymotic diseases (by which we understand the various forms of fevers) have a similar origin. As has been well remarked by Baxter in an able paper on 'The Action of Disinfectants,' the analogies of action of contagia are similar to those of septic organisms, not to processes simply of oxidation or deoxidation. These organisms, studied in suitable fluids, multiply indefinitely when introduced in all but infinitesimal proportions. Thus they are, as near as we can perceive, the very essence of contagia."

The remainder of the President's address was occupied with an examination of the fundamental principles of embryology, tracing the gradual development of plants and animals from the germ or ovum. The address was listened to throughout with great interest and received with loud cheering. At its conclusion a cordial vote of thanks was accorded to the learned professor on the motion of the Earl of Mount Edgumbe, seconded by Dr. Henry Acland.

Throughout the several sittings in the various sections during the following days numerous papers were read on a great variety of subjects, some of which we give portions elsewhere, and others may be made use of by us on a future occasion.

#### BOOKS RECEIVED.

*Concrete: its Use in Building, and the Construction of Concrete Walls, Floors, &c.*  
By Thomas Potter. London: E. and F. N. Spon, and F. W. Reynolds and Co.

The author has, in the volume before us, brought forward in simple language all that can be said for and against the use of concrete as a building material. We (in common with our London contemporaries) have always written in favour of it. Mr. Potter's aim in bringing his work before the public, has been, he tells us, "simply to give an unprejudiced statement of the various forms in which concrete can be applied, and most suitable purposes for which it is adapted." It is matter of surprise that some of the blocks of artisans' dwellings at present in course of construction in this city are not being carried out either wholly or in part in this very satisfactory material. We question much if it would not be more durable than some of the slop brick and mortar work to be met with at every turn now-a-days. In the following words the author expresses his opinion as to the ultimate general employment of concrete as a building material:—"The universal love for bricks and mortar, with all their shortcomings and failures, will not probably for some time to come be supplanted to any very great extent by the introduction of any new, or the re-introduction of any old and abandoned material for wall building, no matter how strong, weather-proof, durable, or economical it may be. . . . A material which should be as economical in any neighbourhood as bricks and mortar, should combine strength with durability, be proof against rains and frosts, withstand the injurious action of smoke, and be easy of application by unskilled labour, has, till within the last few years, been an acknowledged want, and that want, it is improbable, will be nearer realised for some time to come by anything but concrete. That Portland cement and lime concrete must and will, however, come into general use for building purposes eventually, does not admit of a doubt; at the same time local circumstances, with regard to natural productions, and the

character and purposes of intended buildings, must still be the means in a large measure of deciding as to what shall be used in construction; and when the prejudice against concrete, like other prejudices, has died out, it will take its proper position as a valuable and, in most cases, an economical material not to supersede everything else, but as a useful adjunct in building." Our readers will do well to buy Mr. Potter's book, and peruse it carefully.

We have received from the office of *The Garden*, London, three copies of that journal for March 24th, 1877, in which are three beautifully-coloured pears, for which we have to thank the publisher. Better late than never!

#### PUBLIC PARK, LIMERICK.

THE Public Park at Limerick was opened on Monday, the 20th ult., by the Mayor (Mr. James Spaight), Corporation, and Members of the Russell Memorial Committee. The park has been formed by subscription, in memory of the late Richard Russell, Esq., the leading member of the firm of John Morris Russell and Sons. The Earl of Limerick kindly gave the ground. The site occupies about ten acres, and embraces the old Pery Square and adjoining fields and waste land, which, if let for building, would have realised a large sum of money, but which Lord Limerick, anxious for the improvement of the city, and aided no doubt by the advice of his excellent agent, Mr. Vanderkiste, has, as already stated, given to the citizens, who now avail themselves in large numbers of the boon afforded. The old square contains a monument to the late Lord Monteaigle—a statue on a handsome Doric pillar, and the present memorial gateway is of the same order, and harmonises with the buildings on the side of the square.

The entire is enclosed by iron railings along the streets on three sides, and by a wall on the other, it is intersected by walks varying from 15 ft. to 6 ft. in width, and is ornamented with pleasure grounds, &c., and by a beautiful drinking fountain erected by the employés of the Messrs. Russell, in memory of one of Limerick's most enterprising citizens.

Mr. W. Barrington, M. Inst. C.E., 84 George-street, Limerick, is the engineer under whose direction the works have been carried out. The trustees are: John Vanderkiste, Esq., agent to the Earl of Limerick; the Mayor of Limerick for the time being; and Thompson Russell, Esq.

#### SANITARY ADMINISTRATION IN DUBLIN.

A REPORT was brought up and read at the last meeting of the Corporation, from the Committee of the whole house, appointed by order of the Municipal Council of the 13th of August, *in re* dismissal of sanitary police and appointment of other suitable and fit persons:—

"Your committee, in obedience to your order of the 13th instant, whereby the following notice of motion, by Councillor Murphy, was submitted for consideration and report, viz.:—

"That the services of the sanitary police be discontinued from and after the 3rd September, 1877, being the next quarter-day. That notice hereof be given to Colonel Lake, or his successor; and that the Public Health Committee be authorised to advertise for, appoint, and employ other suitable and fit persons instead thereof, at salaries of £1 per week for eight sanitary inspectors, and 25s. per week each for the two superintendents; and that clothing, as like as possible to the police uniform, and of an approved pattern, be provided for this staff; and that none be employed but superannuated police sergeants or constables discharged from the force with a pension and good character."

"Beg leave to report that they met on Wednesday, the 15th August instant, and after careful consideration of the change proposed to be effected in the sanitary staff, by Councillor Murphy,

they, instead thereof, submit the following for consideration and approval by the Council, viz.:—

"That in order to reduce the present needless expenditure of the Public Health Committee, but at the same time maintaining complete efficiency, the present staff be re-arranged as follows:—

"Metropolitan Police employed on Sanitary Duty—Present staff: 2 inspectors at £160—£320; 4 sergeants at £94 9s. 4d.—£377 17s. 4d.; 4 acting ditto at £89 5s. 4d.—£357 1s. 4d.; 4 constables at £80 3s. 4d.—£320 13s. 4d.; 1 constable at £86 0s. 8d. Total present cost, £1,461 12s. 8d.

"Proposed staff:—1 inspector at £160; 3 sergeants at £94 9s. 4d.—£283 8s.; 4 acting ditto, £89 5s. 4.—£357 1s. 4d.; 2 constables at £80 3s. 4d.—£160 6s. 8d. Total £960 16s.; amount of reduction, £500 16s. 8d.

"The above amounts include clothing."

On the adoption of this report being moved, a discussion followed, and finally a resolution was carried that it was inexpedient at present to make any change in the number of the sanitary staff, or, in other words, not to adopt the recommendation of the Committee of the whole house. It was observed by Sir George Owens, who seconded the adoption of the report, that the recommendation, if carried out, would lead to the saving of £500 a-year. Though advocates for economy in general matters, we are not of those who, when the public health is the question, would sacrifice efficiency to a cheese-paring economy. The preservation of the public health and the saving of human life is a more important matter than the outlay of a number of pounds. At the same time we hold that the sanitary staff of the Corporation needs reforming with a view to its proper working and efficiency. The sanitary condition of the city is still a reproach to all concerned in its management, and improvement advances at a snail's pace in a sanitary direction.

#### DOINGS IN DUNDALK.

THE dirty state of the streets in Dundalk has led to some scenes in the town board, some correspondence with the county surveyor, some comments in the local Press, and confusion and bad language in general. The county surveyor is right in saying that the town board is legally responsible for cleansing the streets of the town, and it is the duty of the board to see that they are cleansed, and to waste no more time in drawing useless deductions. One member of the board accuses the surveyor of insolence, because he instructed his assistants to reply, instead of answering himself. Here is the gentlemanly language used by this very intelligent, practical magnate in reference to Mr. Neville, the county surveyor:—"Mark the insolence of the county surveyor! He is written to personally, but he is too great a potentate to reply himself—he gives the reply to his spaniels!" We fear, after this specimen of local dignity and representation, the town board needs a purification as well as the streets. Mr. Neville, the surveyor, has, however, written a letter personally to one of the members of the board in addition to the letter sent through his assistants, and in the former he remarks:—

"In a letter of the 14th November last the Local Government Board informed your commissioners that their duty is to provide for the cleansing of the streets. Instead of this the sweepings from footpaths, waterables, shops, lanes, and passes are swept out on the road, and rubbish thrown out. Will the town board permit this to continue, and a vindictive obstruction and offensiveness take the place of harmonious action for the public good? For the last thirty-seven years I have been improving the formation of your streets, entrances, footpaths, drainage, and sewerage, and they present a very different look now to what they did then; but no one can keep the town clean and free from nuisances but your own officers, who are paid for it."

This is very clear and plain speaking; and there is no insolence here, but information which the sensible member of the town board should kindly receive and act upon.



## LECTURES ON ARCHITECTURE.\*

(Concluded from page 241.)

## TOWN ARCHITECTURE AND MODERN PROBLEMS.

PASSING from the class of considerations which determine the choice of materials, on constructional and utilitarian grounds, we may briefly allude to that of colour, more especially as applied externally. And here we confront the great enemy of architecture in our large English towns: I mean smoke, and its attendant evils, which destroys many of our materials, and injures the effect of all of them; which often renders abortive the best studied designs of chiaroscuro, and too often reduces our buildings to a dull monotony of depressing dirtiness.

And this is not all, for dirt, more than climate, affects our designs, and we cannot indulge with any freedom in the balconies, loggias, and recesses, common under more favourable conditions. Is it too much to hope that science may some day come to our aid, and deal with private chimneys in the same way as it has done with the greater offenders belonging to manufactories, steamers, and public establishments?

It was, I believe, to the energy of Lord Palmerston, relegated, for a time, to the supposed uncongenial duties of the Home Office, that the latter vast improvement of the smoke question was due; and if so, it may serve as an illustration of the old truth, always recognised by really great men, that "whatever is worth doing, is worth doing well."

But whatever improvements science may have in store for us in the future, we must deal as well as we can with the existing state of things, and if we are able to introduce the joys of colour into our streets, we may well be glad to do so. It is very difficult, however, to effect this satisfactorily. Effects of colour, if they appear to spring naturally, and without effort, from the materials employed, will be satisfactory, always supposing that such materials are appropriate to the purpose for which they are used, and in harmony with the main lines of the architecture. Otherwise, external colour is too often vulgar and offensive, and seems to serve no further purpose than to display an affectation and straining after illegitimate effect, which is fatal to repose, and to all principles of true art.

The first æsthetic necessity of architecture is that of apparent solidity and permanence; we must not, therefore, in our climate, indulge in the external use of coloured marbles which only serve to indicate incipient decay. Glazed tiles and pottery have not as yet been very successfully employed on any large scale, and the necessary smallness of their parts will always render them more suitable for mere prettiness than for dignity of treatment, such as we look for in important buildings. Polished granite is free from this difficulty, and if its costliness could be got over, might serve us admirably in our smoky and dirty streets. The use of such a material would necessarily modify our architecture, and compel greater simplicity in details and mouldings, which would be far from an un-mixed evil.

The application of colour, internally, has been practised in all ages. In the majority of cases of domestic architecture, it is less a question for the architect than for the individual taste of the owner. In public buildings, however, it is unquestionable that coloured decoration is one of the most powerful aids to effect at the disposal of the architect.

We all remember recent discussions as to the decoration of St. Paul's, and cannot doubt that Wren would not be contented if he could see his *chef-d'œuvre* in its present unfinished condition. No progress appears to have been made in this matter, though we were lately told by a member of the committee that no less than £40,000 had been collected for purposes as yet unfulfilled. I am not

going to plunge with you into the mazes of this thorny question; but it is, I think, impossible to compare the state of St. Peter's, at Rome, with our own St. Paul's, and then to rest contented with a do-nothing policy in respect to the latter. Some critics have affected to speak contemptuously of St. Paul's, so that it might seem that it is of little consequence whether anything be done or left undone. I may, perhaps, be allowed to remind such persons that it is not very long ago that the word "Gothic" was only used contemptuously, so that Horace Walpole, who speaks of his head as being "filled with Gothic story," nevertheless complains that no one agrees with him, and laments that "the general disuse of Gothic architecture, and the decay and alterations so frequently made in churches, give prints a chance of being the sole preservatives of that style." Fashions change, and we, in these later days, have become so accustomed to hear the rival word, "Renaissance," applied as a term of reproach, that it is necessary to remember that great reputations, whether of men or of buildings, are, for the most part, based upon solid claims.

I have before quoted the views of Lord Macaulay on the question of originality, and you may, perhaps, feel as interested as I was on learning the effect produced on him by the first sight of St. Peter's at Rome. He had, of course, read and heard a great deal about it previously, and was prepared for much—a state of mind often the prelude of disappointment. He writes in his diary of 1838:—"Walked straight from the hotel door to St. Peter's. I was so much excited by the expectation of what I was to see, that I could notice nothing else. I was quite nervous. The colonnade in front is very well—very, very noble—yet it disappointed me, and would have done so had it been the portico of Paradise. In I went, and I was, for a moment, fairly stunned by the magnificence and harmony of the interior. I never in my life saw, and never, I suppose, shall again see, anything so astonishingly beautiful. I really could have cried with pleasure. I rambled about for half an hour or more, paying little or no attention to details, but enjoying the effect of the sublime whole."

Such was Macaulay's first judgment on St. Peter's, a judgment which subsequent visits only confirmed. I notice his opinion, not as coming from one who had made art his special study, still less as the verdict of a professional art critic who is almost bound to prove the necessity of his existence, as well as his superiority, by finding fault. Macaulay was neither of these, but he brought to the question an unprejudiced and widely-cultured mind, which gives weight to his opinions, and which may, perhaps, help some of us to rise superior to the narrowness too often engendered by fashion in art. Referring to the coloured decoration, and particularly to the mosaics which abound in St. Peter's, he says, after another visit:—"The best portraits of the great men of England, reproduced in the same material, beginning with Holbein's Wolsey, and More, and coming down to Lawrence's Wellington and Canning, would be worthy decorations to the new Houses of Parliament. I should like to see also the walls of St. Paul's incrustured with porphyry and verd-antique, and the ceiling and dome glittering with mosaics and gold."

There was a time when any suggestions for the artistic adornment of the Palace of the Legislature fell on sympathetic ears, and the care of such matters was entrusted to a Royal Commission, on which the Consort of the sovereign deigned to serve, and of which his was the moving spirit. Now, this is one of the many things which serve to remind us of the irreparable nature of the public loss, and the evidences of the arrested schemes of artistic decoration are eloquent of the Prince, who gave up his blameless life all too soon for the public good. Macaulay's suggestion stands, however, and a day may yet come for its consideration. He went again and again to St. Peter's, and at last writes: "To St. Peter's for the last time, and rambled about

it quite sadly. I could not have believed that it would have pained me so much to part from stone and mortar." With this quotation, I will leave the consideration of the effects of colour on internal architecture, as a question which, as I have already said, has been generally decided in the affirmative.

When we have settled the arrangement of our towns, and decided on appropriate materials, we have yet to consider the probable future of our domestic architecture, and we shall find here much to occupy our attention. With regard to the houses of the rich, there has certainly arisen improvement, as far as external effect is concerned, though their internal finishings lack, too often, both the solidity and refinement of their predecessors, of so recent a time even as that, for example, of the Brothers Adams. But there is no doubt that there is a disposition to improve; and without entering into details of design, on which much difference of opinion will always exist, we may all rejoice to see stucco making way for stone, and even for granite.

It is natural, under the circumstances which I have attempted to describe, that there should be great differences of opinion on matters of taste. Taste is, too often, a mere matter of fashion; and however unreasonable a fashion may be, no arguments and no ridicule will affect it for a time. Afterwards, indeed, there comes the inevitable recoil, and then the sober conclusions of good sense resume their sway. So it is with architecture: we have had no lack of eloquent denunciation of the works of Michelangelo, of Wren, of Inigo Jones, and other illustrious artists, disposed of under the title of the "pestilent" Renaissance. On the other hand, we heard but recently a war-cry of defiance from a well-known member of Parliament belonging to the present Government, declaring that if there be anything to complain of in the present position of our architecture, it is the direct result of the great "Gothic revival" of our time.

Without necessarily casting in our lot with extreme theorists, we may, I think, fairly note with satisfaction the increase of interest in architectural questions, and the spirit of improvement, particularly in our large towns, which is generally apparent. It seems, indeed, incredible that any critics who have eyes to see the changes that are going on around us, and who remember the days when streets like Gower-street were possible, should do their best to dishearten improvers by their pessimist declarations.

It appears to be a palpable ignoring of obvious facts to deny that our public and commercial buildings, and the houses of the wealthy, are now designed with a care and attention to architectural beauty, which is a healthy sign of progress.

To the great and difficult problem of providing houses for the necessitous population, I have alluded in a former lecture. It is a question surrounded with perplexities, not the least of which will be to secure the application of the improved dwellings, when built, to the purpose for which they have been erected, so that they may be used by the class for which they are intended. Under our present circumstances, it is not for the artisans, but rather for a class just above them in the social scale, that our sympathies are chiefly due. Our artisans have had years of high wages and increasing prosperity, and have prospered accordingly; while our clerks and lower middle class, particularly those with fixed incomes, have had to encounter, as best they might, the effects of rising markets and practically diminished resources. Now that the provision of healthy houses for the poor is beginning to be recognised as a public obligation, I am not without hope that the principle of co-operation, not in any eleemosynary sense, may be applied to the houses of the middle class.

It is this principle which, in our clubs, gives to the member who enjoys a mere pittance of income the comforts and luxuries which only the possessor of thousands can command in his own house. It is the same principle which enables the poor man to

\* By Professor Barry. Sixth lecture. Delivered at the Royal Academy on Thursday, March 22nd.



travel as safely and rapidly as the millionaire; it is the principle which has brought to the houses of all of us comforts for which kings and princes have formerly sighed in vain. But it has as yet been very partially applied among us to dwellings.

It is true we have a few expensive "mansions," where we may live in "flats"; but there is so strong a feeling amongst English people in favour of having a house of their own, and the requirements of family life, in health and disease, are so various with us, that it is doubtful whether the flat system be capable of very extensive development in this country. None the less is it evident that the separate house system is, of necessity, wasteful and expensive. Might it not, therefore, be possible to remedy these evils and yet retain the separate house principle?—to establish economy of service on the principle of co-operation, while retaining the substantial advantages of the habits of life to which we are accustomed, and to depart from which would be distasteful to most Englishmen? If we are to seek the advantages of living, to a certain extent, in common, must we lose the privacy so much value? and is it necessary that we should take up our abode in barracks, piled up perhaps to a tenth or twelfth storey?

It has often struck me that in laying out our towns provision might be made for correcting some of the objections I have referred to. Take the case of squares, for example. Here we have rows of houses surrounding a piece of land, which is planted and turfed, and is of considerable value. Why should it be wasted? Without withdrawing it from the nursemaids and children, who now principally use it, not very freely, might it not be possible so to utilise the subsoil as to provide for the houses around the square most, if not all, of the advantages which the flat system proposes to give?

I have placed before you an illustration of my meaning in a plan for such a square as I have hinted at. In this sketch the principle only is embodied, as the details will admit of much variation.

I have supposed a square of about seventy houses, inhabited by middle-class families. Each house would be complete, as at present, in respect of the sitting and bed rooms. The kitchen and offices, common to all, are placed beneath the garden in the square, which, with the exception of small space in the centre, of about 25 ft. long and 10 ft. wide, would be turfed or planted in the usual way. The kitchen is in the open central space. It is covered with a skylight, and has abundant provision for ventilation. It would be invisible from the houses, as it would be surrounded by a glazed conservatory or greenhouse.

With the exception of the small space occupied by the kitchen skylight and the surrounding conservatory, the square would be turfed and planted as at present, with openings in it occasionally, to light the offices below. The offices would only occupy a small portion of the subsoil, and above them there would be sufficient thickness of earth to support vegetation. An instance of this arrangement exists in the gardens of Parliament-square, Westminster, close to the Houses of Parliament, under which the Metropolitan District Railway now passes. These gardens are, as regards flowers, among the most brilliant in London during the proper season.

The square would not have equal sides, but would be oblong in form, and the houses at the narrow ends of it would be built in the garden, with which they would communicate by means of terraces. By an arrangement of the levels, such terraces might be raised sufficiently to allow of the construction beneath them of rooms, built above ground, and with windows. These would serve as living rooms for such of the servants of the establishment as might be required to live on the spot.

In the conservatory the waste heat from the kitchen would be utilised; plants and flowers would be kept alive in it, and it might also serve as a winter garden, for exercise

and recreation. The kitchen is surrounded by the other offices, radiating from the centre, and passages lead outwards in four directions to the four sides of the square. These passages pass under the roads, and establish a mode of optional communication with the basement of each house. Such communication might take place by means of a door, to be locked at night, like any other outer door, or there might be a window, with a turnstile through which food could be delivered. There would be a call-bell and speaking-tube from each house to the office of the controller or officer in charge of the kitchen establishment.

Beneath the underground passages there would be subways, in which all drains and pipes would be placed in such a manner as to render access to them easy in case of need. Any required service of steam, hot and cold water, gas, or hydraulic power, would be supplied to the houses from the central establishment much more directly and economically than by separate arrangements. Each residence might in this way possess a lift without needing special or expensive machinery. Cooking would probably be carried on chiefly with gas, and the products of combustion from all stoves and fireplaces in the offices would be carried off by shafts, built as turrets at the corners of the houses at the small ends of the square, and so constructed as to consume them. These turrets would also form the boiler flues, and would be available for ventilation and for water-supply. In connexion with the latter, swimming and other baths could be provided for the two sexes, and thus promote health and useful exercise with the rising generation.

It would be the duty of the controller to receive and execute all orders, and to exercise over the whole establishment the same vigilance and economy which rule our clubs. All expenses would be booked and charged to the proper person, the bills to be paid weekly, and the cost of the establishment to be defrayed by a subscription or rate levied on the houses, as is now done for the maintenance of the square gardens, and managed by a committee of residents.

Such are the heads of a scheme which, if there is anything in it, may perhaps be worthy of discussion, and may some day be worked out in detail. It does not, of course, address itself to those who maintain large establishments and think little of economy. It does not profess to secure all the advantages of complete separation. But it is an attempt towards middle-class co-operation in defraying the great and increasing cost of living, and of building operations, in our large towns. It suggests an effort towards combining privacy and comfort with the economical and other advantages of co-operation to a greater extent than appears possible in huge tower-like buildings, laid out in flats, approached by a common staircase. The danger from fire in these great blocks is a contingency not to be thought of without a shudder, while the height is extravagant, and the inmates, particularly the young, the old, and the infirm, are dependent on mechanical contrivances, which may fail them in their hour of need.

In the construction of the houses round the square there would be much saving of cost, and, consequently, of rent; for there would be no need of separate kitchens, sculleries, &c., with their wasteful fireplaces, in each house. All that would be wanted would be a small reception kitchen, in which food could be kept hot, and where any simple cooking could be carried on. It would not, therefore, be necessary to extend the house as far backwards as is now done to provide space for the kitchens, so that less ground would be occupied, and there would, consequently be a saving in ground rent as well as in the cost of building. The coal bill would, of course, be lessened, and each house might be warmed inexpensively by pipes from the central establishment. The necessary domestic service would be reduced to a minimum, and a small staff of cooks would suffice, where now one to each house is required.

Moreover, a better style of *cuisine* would be brought within the reach of those who, in spite of having to give increased wages, find themselves daily more helpless in this respect, so that efficiency and economy would be alike promoted.

It must be evident that our present system of separate living is extravagant, and that it would be easy for one establishment to supply the wants of a large number of separate families. If we assume the existence of seventy houses in our square, with an average number of six inmates to each house, the total of 420 persons is no more than our hotel and club managers are accustomed to cater for daily as a matter of course; and in such places the trouble and expense of providing must be much more than in the case we are considering, of a collection of quite middle-class households.

It is not, of course, to be contended that there will not be drawbacks in all plans of co-operative living, but the problem seems to me to deserve consideration, and it is one which will, I think, press more and more to the front, under the social exigencies of our time. It is desirable, therefore, for architects to recognise the needs of their contemporaries, so as to be ready for any calls that may be made upon their ingenuity and taste. They may find their recompense in bringing their art to bear upon objects which seem at first unpromising, and they may rely upon it that no measure will be so effectual in forming and bringing out a taste for art among the people as that of improving their domestic architecture. Without such taste among the public, isolated efforts will be of little avail, for it is useless to place good things before a tribunal which does not know how to refuse the evil and choose the good.

Nor need we doubt that the real requirements of our countrymen are capable of being reconciled with the principles of art. Without going so far as some writers, who maintain that whatever is useful is beautiful, we admit that architecture will never please if it be not consistent with truth and reason. To press this conclusion too far, as is done by those to whom I have alluded, would force us to condone the ugly structures with which our engineers have been, most improperly, permitted to disfigure our towns,—a conclusion which no one in this place, at any rate, can accept.

In this matter, as in those of municipal regulations, and the construction of theatres and public buildings, it is not right to condemn the agent whom we should fix the responsibility on the principal. Our engineers have shown themselves masters of the science of construction, and if we now awake to complain of deformities, the fault rests not on the engineers, but on the public, who, by their representatives in Parliament, daily allow bills to pass which hand over our towns and country valleys to the tender mercies of a company, intent only on dividends. If the engineers do their duty to their employers by making their constructions as cheap, and often as ugly as possible, the public has no right to complain of the consequences of its own act, although we, as artists, must deplore the absence of such a general and cultivated taste among our rulers as would render it impossible to disfigure the land by Act of Parliament.

We cannot admit that art and beauty are to be thrust aside by a spirit of strict utilitarianism, such as that which contends, for example, that we must not call our ironclad navy ugly because "the beauty of a thing consists in its complete adaptation to the ultimate purpose in view." This defence was made, not long ago, by a distinguished naval architect, in reference to our later ironclads, than which nothing uglier has ever been contrived to float or to sink. I fear that our experience is too recent to allow us at present to admit the claim of their complete adaptation to their purpose of being perfect ships of war, and though we may sympathise with the naturally one-sided views of parental partiality, some of us may find it impossible to forget a picture we have seen within these





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walls, in which a distinguished artist found his best success, in delineating a recent iron-clad, by concealing her details, and hiding her form, as much as he dared, by smoke and flags.

These are resources which unfortunately are not open to the architect, and we must therefore scrutinise closely any claims which render such palliatives necessary. If we are to accept the claim of usefulness, in all its fulness, it has been well pointed out that we may be expected to apply it to music, so as to call the shriek of the railway whistle beautiful, because it is well adapted to its purpose of being distinctly heard at a distance.

We know, however, as architects that, although we are bound to consider utility, utility alone is not art. The one addresses itself to the wants of our lower nature; the other appeals to the mind,—to that diviner part of us which enables us to claim the highest and noblest attributes of humanity, created in the likeness, however marred and partial, of the Most High.

We are not to be told that science is all-in-all, and imagination nothing. Material interests may powerfully affect the course of nations; but the higher feelings of conscience, sensitive to the principles of truth and justice, will ever make themselves heard in public affairs. So it is with architecture. We dare not make it a trade, but will ever claim for it the full position of a fine art. True, it must justify itself by common sense and by a proper adaptation of means to the end in view; but it must do more than this, for it must delight the mind and satisfy the yearnings of a cultured imagination.

It is reasonable and right that we should do justice to the scientific spirit of the age, which has given us the marvels of the steam-engine and the electric telegraph; but we cannot forget that man is not altered by these discoveries. His powers over nature are enlarged, his cravings for knowledge are more easily satisfied, but he is nevertheless the same.

Can he solve the great mysteries of life and death any better than when the world had just been born; or can he look forward into the future with more confidence than his forefathers of thousands of years ago? No, indeed! however much the mechanical side of our nature may have acquired, the imaginative and emotional cravings are the same as they have ever been, and among these is the love of beauty in art. What was beautiful thousands of years ago is beautiful now, and the perfection of the human form divine was first displayed by the first man.

We need not, I hope and believe, despond as to the future before us, in which mechanical ingenuity threatens, according to some, to thrust out beauty. Men will never be satisfied with stones instead of bread, and will ever appeal to art to satisfy the higher aspirations of the soul.

Architects must rise to their mission of ennobling common things, remembering that, if utility claims to be a power in their work, a refined love of beauty must be the governing principle. We cannot call that architecture which neglects the latter. It may be building or engineering, it may give us useful structures and powerful ships; but it is not architecture. We may value it as serving our wants, and possibly as promising a better future; but we refuse to it the name of art.

There is a passage in the thirteenth discourse of Sir Joshua Reynolds which refers to this subject so felicitously that I cannot do better than quote his words. After speaking of architecture, and pointing out that it does not come under the same rules as the imitative arts, he says,—“There is in architecture, as in painting, an inferior branch of art, in which the imagination appears to have no concern.” Architecture “does not, however, acquire the name of a polite and liberal art from its usefulness, or administering to our wants or necessities; but from some higher principle. We are sure that in the hands of a man of genius it is capable of

inspiring sentiment, and of filling the mind with great and sublime ideas.”

The interest of architecture is indissolubly connected with those of its sister arts, which appeal more directly to the masses. To our painter brethren we look, more particularly in the first instance, to endow the masses with a sense of beauty. The surroundings of their daily toil are too often mean and ugly; but our picture galleries should be to them and to us havens of rest and a paradise of beauty. Here we may forget, for a while, the troubles of life, the anxieties,—well for us, if we should not say the greed,—of money-making, with its debasing associations. Here we rise into a purer atmosphere, as we contemplate the creations of genius, which have brought to thousands messages of peace, because they are based on the hopes and the affections of human nature, always and everywhere the same.

The great painter touches a chord in man's heart, which will never fail to vibrate when properly approached. The love of beautiful things may be deadened by the commonplace ugliness of the workshop or the factory; but it is a suspended animation; it is not dead, but sleepeth.

I have said that we look to the painter to pave the way for the enjoyment of architecture, for, in the case of the latter, the appeal must always be to a cultured intelligence, apart, that is, from an admiration of mere bigness, such as would class the pyramids among the architectural triumphs of the world. But we also appeal to the painter, as well as to the sculptor, to work hand-in-hand with the architect. This co-operation is, unfortunately, but too rare, from a combination of causes, into which I cannot enter at the end of my lecture, but without it we cannot hope for perfection, and for nothing less must we strive.

And now, in conclusion, let us believe that there is a place in this nineteenth century for art, and especially for architecture. We must not be impatient if each succeeding age develops new characteristics, nor must we quarrel with the stream of progress if it make to itself new channels, leaving wastes and shallows where once swept a deep and silent flood.

Rather let us be confident that we are not placed, in this our own time, to repine at our lot, and indulge in complaints that others have been better off than ourselves. Let us further be sure, that as long as the love of beauty is implanted in the human mind, it is treachery to art to declare the latter incompetent to deal with the problems of its day.

To us, as architects, such reflections are, perhaps, especially needed. We see around us, on the one side, the calm majesty of the great masterpieces of our art, which have received the admiration of ages, and are venerable, if only from the hallowing influences of time; while, on the other hand, we are jostled out of our places by the bustling energies of builders, surveyors, and engineers, careful about the immediate present, heedless of the past, and thinking of the artistic future.

We are assailed by a multitude of teachers differing the one from the other, and agreeing only in the confidence with which each believes in himself.

Architecture is, in a sense, on its trial, and if it is to take the high place which alone it can fitly accept, it must satisfy the wants of men. It may not be for us to rear structures vying with the stately cathedral of old, expressing, in its solemn beauty, the hopes and fears of generations passed away, and speaking to us, as nothing else can speak, of the vanity of earthly grandeur. It may not be for us to crown the hills with castle-palaces, the symbols of oppression and wrong,—the stronghold of the powerful, the prison of the weak. It may be that the age of lavish architectural display is past; but are we to conclude that there is nothing left?

May not architects yet find success in bringing art to bear on the tastes and habits of millions, and so obtain consolation for the absence of the more selfish isolation of the

past? Walking hand-in-hand with science; welcoming art wherever it may be found; striving to give Englishmen healthier and happier homes;—surely these are not light or unworthy objects?

If the conventional or utility-seeking quality of architecture be sometimes urged against her title of a fine art, she may, perchance, find in it her most complete justification; for hers is not a mission of trifling, or mere pleasure, but rather one of deep and earnest sympathy with the wants, as well as with the artistic feelings, of all classes of men.

## THE HOUSING OF RAILWAY EMPLOYÉS.

At the half-yearly meeting of the Great Southern and Western Railway Company, the Hon. Charles Trench remarked that the company had spent £2,200 on cottages for their workmen, and proposed to spend £5,000 more. The plans were not very good ones. They were nearly all one-storey houses, and, he thought, with a little additional expense, a better class of houses might be built than they had built or were building. It was better to build six good wholesome cottages than seven that would not be wholesome and only one-storey houses.

The chairman said there was no matter connected with the affairs of the company which they would wish to have attended to more than that of having their employés properly housed, as it made them more anxious to retain their situations; and he certainly directed their engineer to communicate with the Hon. Mr. Trench on the subject of these cottages. They had built a vast number of cottages on different plans, and they found those that answered best were those one-storey houses. When they built two-storey cottages, they found that, instead of conducing to the comforts of life, they tended to the degradation of the people who occupied them; they would put a cow in one and a pig in another, and so on. Also in the item of expense there was a very serious difference. They could get good cottages for £100, and those others would cost £250. They had built very good cottages at Inchicore for their workmen, but a labourer earning 14s. a-week could not pay a high rent. However, they would be happy to receive any suggestion from Mr. Trench on the subject of these cottages. The secretary informed him the plans for these cottages were being revised by their engineer.

## BUILDINGS FOR WORKING MEN.\*

In attempting to treat the question submitted to me, namely, “Buildings for Working Men,” I have not prepared plans either for sites or for buildings, as these would have necessitated details into which I have not had time to enter, and which I think this Congress would not have time to discuss. Each site may require special plans and special details.

Those whose duty it has been to inspect existing structures (I will not call them buildings) inhabited by working men all over the world, will, with few exceptions, find that they have been heaped or piled up out of the rudest materials and in the rudest forms. There has not been plan or thought to secure wholesome sites, and shelter in which health could be enjoyed. The results have been, and are, degraded populations and disease in excess.

Buildings for working men should be placed on appropriate sites, and should be constructed out of sound materials. The site should be dry, and should be within one mile of the place of labour, if this is practicable, or rail or tram communication should be included in the rent.

Plan.—As to plans, the site and surround-

\* By Robert Rawlinson, C.E. Read at Birmingham Congress.



ing conditions must in some degree dictate the plan. In a town where land is very dear the block plan may be adopted, as in the Waterlow, Peabody, and other similar blocks of model cottages, but where the price of land will allow of a more open arrangement, workmen's houses may be arranged in streets, but never in closed courts. The evils resulting from closed courts are many and great. There is not that privacy which is so necessary for family comfort; sunlight is excluded, and the circulation of air impeded the children are an annoyance because there is no proper playground; and if there is one drunken, swearing, immoral family, all are liable to be tainted, all are made miserable. The evils resulting from court houses in towns has at length received legislative attention, and we have the Artisans' and Labourers' Dwellings Act, 1868, and the Labourers' Dwellings Improvement Act, 1875. Under the powers of this latter Act, many existing evils will be remedied in towns and country. Structures in which disease is generated and paupers are grown, until the relieving officer pays more than the rent in out-door relief, may now be swept from the face of the earth, and on an improved site new wholesome dwellings may be erected, the old site being cleared, sewered, and made wholesome.

As Inspector under the Public Health Act, I have over and over again shown in my reports that court and cottage properties in towns existed, the value of which was not more than from three to five years' purchase, and that, area for area, the rent paid for some wretched den of a common lodging-house was more than the cost of a similar superficial area in Buckingham Palace. I have also shown that the money paid by a relieving officer was taken for the rent of the premises which bred the disease and poverty designed to be relieved, and that it would be far cheaper for the parish authorities to purchase such properties, pull them down, and build wholesome residences where there should be a chance of morality and health. The Labourers' Dwellings Improvement Act, 1875, is, I am happy to say, the result.

The question as to whose duty it is to provide wholesome buildings for working men may be discussed from several points of view—political, social, moral, and economical. It may be stated broadly and as a truth that—Firstly—There is no value without human life. The fairest portion of this earth's surface can only remain a desert without inhabitants, and these must be working men. Secondly—Moral and healthy human life has the greatest value, and imparts the greatest value to all surrounding things, land, and houses. Thirdly—The value of healthy human life springs from labour. Hence, that country will be the richest in which active, useful labour most abounds, and is most prized.

A country cannot be great and powerful without working men. Human life is the prime source of value, and it is human law which creates property. A nation is an aggregate of individuals, and, consequently, as are those individuals, so will the nation be. Socialism, in some of its aspects, is not pleasant to contemplate, and yet socialism is at the root of national safety. The individual must be cared for and provided for by combination; but the less a state has to do with social combinations and arrangements, the better will it be for the entire community. It is, however, the duty of a state to enact just laws, and so to make morality practicable, to maintain order, and to punish crime; and when the use of this word "punish" can be dispensed with, it may be blotted from our dictionaries, as, in some forms, punishing crime begets crime.

*Houses as they are.*—Man, as he advances in civilisation, must be clothed and housed, each operation involving labour and wealth. As society is constituted, individual men cannot provide independently wholesome houses; these must, therefore, be provided for them (so far, involving landlord and tenant). Free trade in house construction has

not worked advantageously for the tenants, as the fearful evils found to exist abundantly prove. Hovel construction in rural districts has pauperised entire agricultural parishes, and the slums of towns are known to be seats of disease, as also haunts of crime and vice. Investigations have ascertained the facts, and reports have set them forth, and the remedy. Good buildings for working men must now be provided. What constitutes a good building for a working man?

The site must be dry, and must be capable of being sewered and drained. There are hundreds of sites in Great Britain which are damp, and which also are so low as to be subject to flooding, and cannot be drained without pumping.

Good wholesome water should be available. There are thousands of cottages having no available water, but from an impure source.

Buildings for working men should be of sound materials—brick or stone—not mud, and, for several reasons, not of timber, though timber houses may in some districts be the cheapest; but there is the risk of fire, and they are subject to vermin.

Houses for working men should have sitting-room, kitchen, and scullery, and not fewer than three bedrooms. Each workman's house, whether in town or country, should have a water-closet convenience. A sitting-room and best bedroom each should not be less in area than 12 ft. square, and should have door, window, and fireplace.

In a workman's house no room should be less in height than nine feet from floor to ceiling, the window should be capable of being opened from the top, and there should be means for ventilation from the ceiling. As houses are at present constructed, no care is taken to preserve the spaces betwixt (underneath) the ground and the floor or the ceiling and the floor clean, but rubbish and shavings are left in to breed vermin and aid fire if one occurs. Thousands of workmen's houses in town and country are placed on improper sites because the land is cheap. The place may be a swamp; or, worst of all, a mass of refuse filled in over old brick-yards; or, a mass of chemical waste. A use of all such sites should be forbidden, and their occupation be prevented.

In workmen's houses it will not be practicable to give each house every necessary convenience, such as accommodation for washing, drying, ironing, and mangling.

The establishment of baths and washhouses has shown what may be accomplished in this direction; and, in place of building costly places (baths and washhouses) which are necessarily isolated and at long distances from working men's families, they should be small, compact, and multiplied over the entire inhabited area—a bath and washing establishment for, say, each fifty houses, that is one on each acre of town area; if for twenty-five houses all the better. Such an arrangement would be of more practical use than adding an additional room to each workman's house.

In the country, workmen's (labourers) cottages may have garden allotments.

The most comfortable and wholesome arrangement of workmen's houses in towns will be in streets, the houses on plan having front and back room, scullery, water-closet, and yard. The front street should be not less than 30 ft. in width, the back street not less than 18 ft. in width. There may be about fifty such houses on each town acre, having a population of 250.

Cottages in the country should not exceed 25 to the acre, having a population of 125.

Model houses, in blocks, will of course occupy much less space, and accommodate greater numbers.

Narrow streets, narrow courts, and narrow back passages in towns accommodate more tenements, but at fearful cost to health and morals, as may be witnessed by any person who will visit and inspect them. I have inspected, measured, and tabulated such dwellings in many towns, the remembrance of which is but as the remembrance of a nightmare.

## PROTECTION OF ANCIENT BUILDINGS.

THE following statement has been issued by the "Society for the Protection of Ancient Buildings":—

A society coming before the public with such a name as that above written must needs explain how, and why, it proposes to protect those ancient buildings which, to most people doubtless, seem to have so many and such excellent protectors. This, then, is the explanation we offer. No doubt within the last fifty years a new interest, almost like another sense, has arisen in these ancient monuments of art, and they have become the subject of one of the most interesting of studies, and of an enthusiasm religious, historical, artistic, which is one of the undoubted gains of our time; yet we think that, if the present treatment of them be continued, our descendants will find them useless for study, and chilling to enthusiasm. We think that those last fifty years of knowledge and attention have done more for their destruction than all the foregoing centuries of revolution, violence, and contempt. For architecture, long decaying, died out, as a popular art at least, just as the knowledge of mediæval art was born. So that the civilised world of the nineteenth century has no style of its own amidst its wide knowledge of the styles of other centuries. From this lack and this gain arose in men's minds the strange idea of the restoration of ancient buildings; a strange and a most fatal idea, which by its very name implies that it is possible to strip from a building this, that, and the other part of its history—of its life that is—and then to stay the hand at some arbitrary point, and leave it still historical, living, and even as it once was. In earlier times this kind of forgery was impossible, because knowledge failed the builders, or perhaps because instinct held them back. If repairs were needed, if ambition or piety pricked on to change, that change was of necessity wrought in the unmistakable fashion of the time; a church of the eleventh century might be added to or altered in the twelfth, thirteenth, fourteenth, fifteenth, sixteenth, or even the seventeenth and eighteenth centuries; but every change, whatever history it destroyed, left history in the gap, and was alive with the spirit of the deeds done amidst its fashioning. The result of all this was often a building in which the many changes, though harsh and visible enough, were by their very contrast interesting and instructive, and could by no possibility mislead. But those who make the changes wrought in our day under the name of restoration, while professing to bring back a building to the best time of its history, have no guide but each his own individual whim to point out to them what is admirable and what contemptible; while the very nature of their task compels them to destroy something, and to supply the gap by imagining what the earlier builders should or might have done. Moreover, in the course of this double process of destruction and addition the whole surface of the building is necessarily tampered with; so that the appearance of antiquity is taken away from such old parts of the fabric as are left, and there is no laying to rest in the spectator the suspicion of what may have been lost; and, in short, a feeble end lifeless forgery is the final result of all the wasted labour. It is sad to say that in this manner most of the bigger minsters, and a vast number of more humble buildings, both in England and on the continent, have been dealt with by men of talent often, and worthy of better employment, but deaf to the claims of poetry and history in the highest sense of the words. For what is left we plead before our architects themselves, before the official guardians of buildings, and before the public generally, and we pray them to remember how much is gone of the religion, thought, and manners of time past, never, by almost universal consent, to be restored; and to consider whether it be possible to restore those buildings, the living spirit of which, it cannot be too often repeated, was an inseparable part of that religion and thought and those past manners. For our part we assure them fearlessly that of all the restorations undertaken, the worst have meant the reckless stripping a building of some of its most interesting material features, while the best have their exact analogy in the restoration of an old picture, where the partly perished work of the ancient craftsman has been made neat and smooth by the tricky hand of some unoriginal and thoughtless hack of to-day. If, for the rest, it be asked us to specify what kind of amount of art, style, or other interest in a building, makes it worth protecting, we answer, Anything which can be looked on as artistic, picturesque, historical, or substantial; any work, in short, over which educated artistic people would think it worth while to argue at all. It is for all these buildings, therefore, of all times and styles, that we plead, and call upon those who have to deal with them to put



protection in the place of restoration, to stave off decay by daily care, to prop a perilous wall or mend a leaky roof by such means as are obviously meant for support or covering, and show no pretence of other art, and otherwise to resist all tampering with either the fabric or ornament of the building as it stands; if it has become inconvenient for its present use, to raise another building rather than alter or enlarge the old one; in fine, to treat our ancient buildings as monuments of a bygone art, created by bygone manners, that modern art cannot meddle with without destroying. Thus, and thus only, shall we escape the reproach of our learning being turned into a snare to us; thus, and thus only, can we protect our ancient buildings, and hand them down instructive and venerable to those who come after us.

### THE TELEPHONE.

At an evening lecture in connection with the meetings of the British Association at Plymouth, Mr. Preece, Electrician to the Post Office, delivered a lecture on telegraphy and the telephone, specially intended for working men. The lecturer at the outset narrated the progress the art of telegraphy had made within recent years, and explained that of the two systems of communication now in use, one was that which appealed to the eye and the other that which appealed to the ear. He intended to illustrate the latter, because he could make it evident to all his audience with the aid of a toy musical instrument. He instructed his audience in the letters of the Morse alphabet, and by means of beautiful experiments he illustrated the effects of electricity in producing heat, light, magnetism, and sound. Between the platform and the other end of the room he placed two poles bearing seven wires, and with this simple apparatus he exhibited at once the principle and the practice of telegraphic communication. One of the messages transmitted was from the Mayor of Plymouth, and it offered to Mr. Preece the thanks of the working men of the town. Much amusement was caused by giving a few specimens of curious telegraphic errors, which he described as the follies of telegraphy. But in proportion to the amount of work done the mistakes were really very few. At Telegraph-street, London, during one day he found that as many as 68,713 messages had been handled, in addition to 1,000,000 words for the Press, and he felt satisfied that the errors committed were extremely few and trifling. The lecturer called attention to the means adopted for increasing the rapidity of transmission, stating that by the introduction of the automatic system in England the carrying capacity of wires had been multiplied five-fold, giving practical illustrations of the duplex system, by which upon the same wire, at the same time, two messages can be sent in opposite directions, and the duplex by which two messages can be sent in the same direction, the two together forming quadruplex working, of which system in America 50 circuits are in operation, but showing that the relative capacity of the English automatic and of the American quadruplex systems are as 160 messages per hour to 130. He next explained various causes of disturbance, such as earth currents, wire contacts, and stormy weather; but he maintained that the practice of the art of telegraphy, so far from being a source of danger, was rather a protection during thunderstorms. Mr. Preece next narrated the history of the telephone, and to Professor Graham Bell he accorded the distinction of having been the first to render possible the transmission of the human voice to a distance through a telegraph wire. He first expounded the principle of the operation, and then opened communication by telephone between the platform and the opposite end of the room; second, between the platform and Plymouth Post-office; and, third, between the platform and the Post-office of Exeter. Sir William Thomson and Professor Allen Thomson also held communication with the Plymouth Post-office, and certified they had distinctly heard every word spoken in reply to their messages—more distinctly, indeed, than if their co-locator had been talking

through a speaking-tube. Communication with Exeter was afterwards established, and the operator at that distant city promptly and distinctly responded to the questions addressed to him. He described the state of the weather, declared he heard the applause of the audience, sang a line of a song, and when Professor Allen Thomson shouted "Hey diddle diddle. Follow that up"—the reply was immediately given, "The cat and the fiddle." The operator was also able to recognise the tones of Mr. Preece's voice when he spoke, and to tell when a stranger to him used the telephone. In conclusion, Mr. Preece said that he should not be surprised if he was informed one day not far distant that Sir William Thomson had talked with Professor Graham Bell across the Atlantic ocean.

### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

THE dissolved Smock-alley company having been offered by Victor the use of the theatre, clothes, and scenes, and being convinced that Victor could not render them any more kindly service than what he was doing, accepted his proposal, and resolved to make an attempt on their own part to secure a portion of the public patronage. Their position was a trying one, in the face of a strong opposition. The following advertisement was drawn up and signed by the principal performers of the dissolved company:—"Theatre Royal, May 2nd, 1759. As Mr. Sheridan, by a letter to Mr. Victor, closed his interest in this season's performance on Friday last, the 27th of April, we whose names are underwritten have determined to perform for our joint profit, through this present term. We cannot address the public on this occasion without expressing our most grateful thanks for the constant instances of favour and protection which we have experienced through the whole course of this season, at a time also when every endeavour was used, and every theatrical art exerted, to oppose a set of persons who were unexpectedly deserted and abandoned. Unforeseen losses will, it is hoped, recommend us to the continued patronage of the town. And we beg to assure the public that it shall be our pride and study to perform the ensuing representations with as much accuracy and diligence, *now we are left to our own conduct*, as we have been compelled to suffer irregularity and confusion, from having been subjected to a *variety of disappointments*." The performers who signed this document were—W. Digges, H. Brown, I. Sparks, T. Heaphy, L. Kennedy, W. Fred. Glover, J. Wilder, T. Ryder, G. Stayley, F. Aicken, J. Watson, T. Farnel, R. Hurst, F. Kennedy, S. Wilder, S. Ward, M. Phillips, E. Farrell, A. Mason, E. Glover, E. Storer. Only a very few of the above became afterwards well known, and achieved a reputation which still lives in Irish theatrical annals.

The struggle was a desperate one, and the improvised company, after playing a few nights to bad houses, was obliged to close on the 28th of the same month of May. The lateness of the season, coupled with the fact, as Hitchcock pertinently observes, "the public were not sufficiently interested in their misfortunes," led to their sudden collapse. The opposition in Crow-street that season did not run many days longer, for they also closed on the 6th of June "with the pompous tragedy of 'Alexander the Great.'"

In this year Sheridan's connection with the Irish Stage as a manager finally closes, though as an actor he afterwards appeared a few times on the Dublin boards, and also as a reader or lecturer. We have already given an estimate of Sheridan's abilities as a performer, and the estimate formed by his contemporaries, with other personal particulars, so we will content ourselves here by quoting the last words of Hitchcock's first volume in allusion to the rather disheartening ending of Sheridan's managerial connection with the

Dublin Stage:—"Here, with my readers' leave, I shall pause, and in just compliment to the virtues of so eminent a man, to whom the stage has so many obligations, close the first volume of this work, sincerely lamenting that such unparalleled treatment should be the reward of so many years spent in a pursuit so noble as the advancement of the drama, and heartily wishing that, instead of his native country, his happier stars had placed him at the head of the London theatre, where in all probability, long ere this, fortune had crowned his labours, and fame, in presenting the bust of Garrick to posterity, had reserved a place for Sheridan, encircled with a portion of those wreaths which at present so justly adorn the brows of our immortal Roscius." Graceful words these, and they were well deserved, for, whatever Thomas Sheridan's failings might be, he appears throughout to have been an honourable person, a respectable actor, a scholar and gentleman, a good teacher, and an earnest reformer of abuses connected with the stage.

Having brought the reader down to the close of Sheridan's management, and the opening and close of the first season at the new Crow-street theatre, we will now take a brief retrospect of matters historical in relation to Crow-street, as a memorable locality. The dissolution of the Smock-alley company under Sheridan, and the opening of Crow-street theatre under Barry, forms a somewhat remarkable epoch in Irish theatrical annals; but to our retrospect. In addition to what we incidentally recorded in our earlier notes in reference to Fownes's-court (the present site of Fownes's-street), Madam Violante's booth, where young Peg Woffington made her first *début*, and the early exhibitions and entertainments at the music hall in Crow-street, we will give now some fuller particulars. Mr. Gilbert, in his "History of Dublin," brings together several waifs and strays of historical interest in connection with the locality under notice. In 1731 a Music Hall was erected in Crow-street by a Mr. Johnston, and fitted up in an attractive style. As already mentioned, it was opened with a "ridotto" on November 30th, by Mr. Griffith, joined by Mr. Whyte, from England. This entertainment was attended by the principal nobility and gentry of Dublin, and subsequently a series of similar entertainments was continued here with success, under the direction of Signor Arrigoni, an Italian composer and violinist. Shortly after the opening of the Music Hall, on one occasion a serious riot took place between the gentlemen servants and the chairmen (the sedan chairmen), assisted by the mob. The soldiers on duty were unable to disperse the crowd, and reinforcements had to be despatched from the main guard. The quarrel became so fierce, the soldiers were obliged to fire upon the rioters, some of whom were killed and wounded, damage being also done to the building on the occasion. These fashionable "Assemblies and Ridottos," which were continued at the Music Hall in Crow-street for several years from time to time, were attended by the Viceroy as well as the chief of the Dublin aristocracy. A lady's subscription to each of these was a British crown, a gentleman's costing half a guinea. The doors opened at eight, the "beaufetts" at ten, and the supper room at eleven o'clock.

In 1742 the Charitable Music Society of this city, finding their members had greatly increased, removed their meetings from the "Bear" in College-green to Mr. Johnston's hall in Crow-street, and here on every Wednesday evening a concert was performed, and, as the announcement said, by "several of the best hands in town, the room fully illuminated and disposed in the most convenient manner for the reception of the company and the accommodation of the performers."

The establishment of the Hospital for Incurables in this city is owing to the charitable exertions of the Musical Society of Crow-street. In 1743 this society agreed to appropriate funds to that purpose, and in

\* See ante.



1744 they fitted up a house for such object, which was long chiefly supported by the exertions of the Musical Society. One of the announcements of the amusements of 1744 will illustrate their nature, which is to the following effect:—"For the entertainment of the nobility and gentry, &c., at the Music Hall in Crow-street, on Tuesday, the 6th day of November, will be a new entertainment called Ambigua, to be prepared by Mr. Johnston, and for the better accommodation of all who intend him the honour of their company, he will have two bands of music, two dancing rooms, two tea rooms, and two card rooms. The doors will be open at seven, and the wine beaufetted at nine o'clock, at assembly prices." The term "buffet," using the modern spelling, appears to have become pretty general of late years in London and other places, in connection with refreshment bars at railway stations and other places.

In 1747 the Charitable Music Society transferred its meetings to the "Philharmonic Room," in Fishamble-street. In 1751, in the Music Hall, Crow-street, were held several ridottos and assemblies, the admission to the latter being 2s. 8d., the entertainments consisting on dancing and cards, with tea and coffee.

"In July this year," writes Mr. Gilbert, "as appears by the original lease in the writer's possession, Peter Bardin let to John Baptist, Murrella, Joseph de Bœck, Stephen Storace, Daniel Sullivan, and Samuel Lee, for six years, at the annual rent of £113 15s., 'the Hall, commonly called the Music Hall, on the north side of the street, called Cecilia-street, near Crow-street, with the rooms and apartments thereunto belonging, together with the use of the several goods and furniture.' The lease also contains a special covenant, that Bardin should have two free tickets to pass persons at all times during the demise, to any part of the premises, to view any play, opera, or music meeting, exhibited or performed there." In 1753 subscription balls were given in this Music Hall by John Whelan, and in the following year Mr. Rackstrow exhibited his remarkable series of anatomical wax works, now preserved in Trinity College. It is stated that in the production of these, forty years had been spent by Denoue, Professor of Anatomy to the Academy of Sciences at Paris. Speaking of the site of the new Crow-street Theatre, John O'Keefe, in his "Recollections," writes:—"On the site where Crow-street Theatre was built, once stood a fabric called the Music Hall. I recollect seeing this building; the front gates faced the end of Crow-street. While the foundations of Crow-street Theatre were preparing on this spot, I, amongst other boys, got jumping over them, little thinking that on the very stage then erecting would, in process of time, rise my own fabric of 'Castle of Andalusia.'"

It was not until May, 1751, that a Spranger Barry's agent found a suitable site for the projected theatre, which was talked of and determined upon some years previous. In the last-named year, Barry's agent took a lease of the Music Hall, paying a fine of £500 and an annual rent of £50. To make room for an ample stage to compare with, if not to surpass Drury-lane in magnificence, several adjoining lots of ground belonging to different parties were taken, and fines amounting to £400 were paid, with an aggregate annual rent of £128. The ground of the Music Hall, with adjoining premises, were taken on leases for the long term of 500 years, without any clauses of surrender, and one portion of the site was for 900 years.

The projected work became of course too heavy for Barry's own resources, but a subscription list was opened, which appears to have very soon filled. The money being subscribed, builders were soon employed, the Music Hall demolished, and the new theatre erected. We read that the total expenditure, including decorations, furniture, wardrobe, and machinery, was upwards of £22,000. The privileges appertaining to the subscribers and the conditions respecting the interest on their money were arranged thus:

The first twenty subscribers of £50 each towards the new building were entitled to the first claim upon it, with 5 per cent. interest on their money, and a free ticket. The second subscription was of twenty persons at £25 each, upon Barry's personal security, each to have a free ticket till paid off.

The capacity of the Crow-street theatre, as erected for Barry, will be understood from the following dimensions: Length of the house in the clear, 131 ft.; breadth, 50 ft. 9 in.; breadth of the stage between box and box, 36 ft. 6 in.; depth of the stage, 90 ft., to which might be added 45 ft.; depth of the pit, 26 ft., to which might be added 9 ft. "There was also a commodious box-room, large enough to hold the entire company that could sit in their boxes, whence they immediately retired at the end of the play, as to a drawing-room, to converse till called to their carriages."

It will be seen from what is above stated that the new Crow-street Theatre could favourably compare for its time with some of the best in London, but, as Victor observed, its after history proved, despite the many theatrical triumphs within its walls, "a foundation of misfortunes to many."

Taking up the thread of our subject, the end of the season of 1759 witnessed Barry and Woodward in sole possession of the field, and exulting in their success. With an excellent company, and commanding public favour, no doubt they thought that all chance of a successful rivalry was at an end, at least for a considerable time. They were mistaken, however, if they ever entertained the thought, for Smock-alley building was still a standing menace, and those that remained unprovided for of its company would form the nucleus for a new company. A leader was necessary to bring together the shattered corps. Many suggestions were thrown out, meetings and conferences held, but difficulties seemed to present themselves on almost every side. Necessity, as usual, brought upon the surface a feasible method for extracting actors from their unhappy position, and starting them afresh. Smock-alley is to have a new manager, and the lucky or luckless wight appears in the person of a Mr. Brown, on whom every eye, as Hitchcock says, seemed turned as their last hope. The same authority adds—"Indeed his known indolence of temper and extreme inattention to business little qualified him for such a station as conductor of a theatre; but his extraordinary abilities as an actor, the reputation he had so justly acquired with the town, joined to his knowledge of the stage, overbalanced these defects, and seemed in some measure to qualify him for this peculiarly arduous task. On his part his fortunes were desperate. He had not anything to lose, and might, if fortune smiled, reap some temporary advantage."

When all fruit fails, 'tis said in this country, welcome haws; so in their desperate situation, all the performers remaining to the fore at the time, ranged themselves under the banner of manager Brown, promising him their loyal assistance. This new manager, of a very short campaign, commenced operations by entering into a treaty with Mr. Sheridan for the possession of the deserted house for the ensuing winter. The prospect of success before Brown was small, but Sheridan gave him possession (as there were no other applicants), with the use of all appendages, upon very modest conditions. How the new manager conducted Smock-alley during his brief theatrical campaign, and what were its principal attractions, will appear as we proceed.

**MAGGOT TRADE.**—A peculiar kind of industry—that of breeding maggots—has lately, it is said, been tried in the neighbourhood of Paris. Over the soil were spread quantities of stale fish, dead lobsters, odorous poultry, and other refuse of the markets, as much as half a ton of large fish being taken on the premises in a single day. The maggots, which soon became abundant, were carefully picked out and packed in casks of galvanized iron, and finally were sold for fish bait and chicken food.

## APPLICATION OF BRAKE POWER TO CONTROL RAILWAY TRAINS.

In the Mechanical Section of the British Association, the President, Mr. E. Woods, delivered an interesting address on the "Application of adequate Brake Power to control Railway Trains." He referred at length to the appointment of the Royal Commission in 1874 to inquire into the causes contributory to accidents by railway collisions, the many experiments which were made by the Commissioners with a view to ascertain the friction of carriages and to discover the most available and effective mode of applying brake power, and the relative efficiency of the different brakes in use. Brakes were not sufficient. Continuous brakes appeared absolutely essential. In fact, brakes should be adapted to all the wheels of a train, and the guard should have the power to bring the whole of them into immediate action. Accordingly, the principal railway companies had reported to the Board of Trade that they had adopted the system of continuous brakes, and others were preparing to make trial of inventions which promised better results. It was no part of the duty of the Royal Commission to select for commendation any particular form of brake, but only to conduct trials with all possible care, and record the facts which these trials disclosed. Mr. Woods illustrated by diagrams the comparative efficiency of the different forms of brake power. It appeared that the addition of sand increased the retarding power by 1½ per cent. The recommendations of the Commissioners had met with prompt attention by the railway companies. The question of the best form of brake blocks was also discussed. Cast iron and steel were fast superseding wooden blocks. The paper concluded with the following practical suggestions. The general adoption of the effective system of continuous brakes in carriages which had to run from one line to another, would certainly be productive of much advantage, for in breaking up and re-making up a train at any junction station, they would be found fitted with the appliances requisite for working together. If the allied companies could agree to adopt the same system, there is little doubt but that the conversion of ordinary into continuous brakes would proceed with far greater rapidity than would be the case on the other assumption, and that the public would at a much earlier period be found to enjoy the full benefit of the change. Nevertheless, until sufficient time has been allowed for testing, under all circumstances, the merits of the different systems now on trial, it may be scarcely reasonable to expect the present adhesion of any considerable number of railway companies to one particular system. The time, however, had arrived not only when each system should be scrutinized and tested in the most complete manner, but when the companies should clearly set before themselves the conditions which a good continuous brake should satisfy. A study of the different systems of brakes came under notice of the companies, and their behaviour under the different circumstances of this application seemed to point to the following as the conditions which a perfect continuous brake for heavy fast trains should be called upon to satisfy:—1, the brake power should be applied to all the wheels of the vehicles throughout the trains; 2, the power by which the blocks are forced up on the wheels should be adequate to skidding the wheels upon the speed becoming moderately reduced; 3, the driver should have the whole of the brake power of the train completely under his command and be able to apply it at a moment's notice, as he is the first person likely to discover any obstruction ahead, and is primarily responsible for the regard of danger signals. He can thus stop the train at once, and no time is lost by his having to signal "danger" to the guard; 4, the guards should individually possess the like means of applying the continuous brake, that they may be enabled to stop the train without reference



to the driver in an emergency which may have manifested itself to the guard, but of which the driver is unaware—such, for instance, as a broken axle or a carriage getting off the line; 5, the power in hand should be susceptible of easy modulation, that the driver may be able to apply a moderate amount only for effecting ordinary stops, while he keeps in reserve a proper excess of power to be used only in emergencies, as in the contingency of stopping rails; 6, full brake application should not require more than a very moderate effort on the part of driver or guard; 7, the pressure should be steady, and distributed as equally as possible over all the wheels and acting upon them with the intervention of some elastic medium to prevent too sudden and violent action to occasion the snapping of chains and to inconvenience the passengers; 8, the machinery should be of simple construction, not likely soon to get out of order, and admitting of being easily repaired; 9, indication should be constantly afforded to driver and guard that the brakes are in proper condition to work or otherwise; 10, a power of working the tender brake and the van brakes by hand as well as by power may be advantageously retained; 11, the brakes to be self-acting in case of the severance of the train, and when severed the guards to have control over the several portions; 12, automatic action being provided, means should be furnished to the brake attendants for modifying that action instantaneously, according to the circumstances in which the train may be placed after an accident has occurred; 13, it would be dangerous, and, therefore, inadvisable, to give to passengers any power over the brakes. Such seem to be the principal conditions necessary for realising the conception of a perfect brake, and then, when carried into practice and combined with the power of applying at will a force which, inclusive of the friction of the train, should amount to 10 per cent. of its weight, would constitute an invaluable instrument in the hands of our trains' attendants for use under contingencies of almost daily occurrence at some place or another of the great network of railways which covers this country.

#### ADVERSARIA HIBERNICA,

##### LITERARY AND TECHNICAL.

In the preface of "A Descriptive and Picturesque View of the City of Dublin"—a work which is generally known as "Malton's Views of Dublin"—covering the time between 1791-7, some remarks are made concerning the appointment of not only a city surveyor, but a city delineator and historiographer, and their duties, and the value of such offices, and the works likely to be performed. The editor of the work, whoever he was (for it is doubtful if James Malton, who was himself an artist, was also the author of the descriptive letterpress and historical portion of the volume), gives expression to opinions which were perhaps in advance of his time in Dublin, and, on the whole, there can be little exception taken to his observations. During the era of the Irish Parliament, when Malton sketched the public buildings of Dublin, the spirit of art and architecture was manifesting itself in different directions, and the publication of a work like Malton's was calculated to give an impetus to literary taste and to the development of architecture, painting, and sculpture.

But in respect to our editor's preface and the utility of his work, we will let himself speak:—"When the capital of an extensive kingdom has arisen to a state of opulence and grandeur that distinguishedly marks it for importance and beauty, persons of ability should be employed to delineate and diffuse abroad its particular excellencies. If it is a nation's emulation to appear respectable in the eyes of neighbouring powers, by a display of superiority in art as well as in opulence, it is then worthy of consideration that those peculiar beauties and conveniences that are characteristics of both should be properly

and worthily depicted. In addition to the appointment of city surveyor, there should be the offices of city delineator and historiographer; the province of the former to delineate accurately, whether geometrically or perspectively, or both, all remarkable structures, &c., to be engraved on a plan to make a complete work in continuation, at the charge of a public or royal fund, regulated by a board of controul; and to the latter should belong the employ to pen the history of each, with such other particulars as would give thorough information concerning every local transaction. Thus an invaluable body of the architecture and history of the city would be preserved, and form a repository of the variation in the arts, and of the causes that have successfully influenced them."

For the better carrying out of the work suggested in the foregoing extract, the editor suggested the instances of the Dublin Society, the Society of Antiquaries, London, &c., to whom every draft and description should be submitted before publication. Private enterprise since the time in which our author wrote has accomplished much of the work he would have transferred to a public board or supported by a royal fund. Corporate bodies still interested in the improvement of their respective towns and cities could still usefully take up much of the labour indicated.

The preface proceeds:—"A work conducted on the plan just suggested would greatly assist the determining on any alteration in a city, particularly when to give beauty was the object of chief consideration. In further aid of such design, application should also be made to distinguish artists, who, from observation and practice in the delineation of existing objects, must acquire so just a discrimination of what constitutes true beauty, as much to outweigh the opinions of those who ground their determinations from designs upon paper unexecuted; in confirmation of which observation, the many tasteless erections daily reared are incontestible evidences. The artist, from a knowledge of form and harmony of colouring, readily discerns the true features of the picturesque, which, when perfectly pure, is admitted by all; the eye of Nature involuntarily acknowledges real beauty; uniformity is, no doubt, a requisite in some compositions, but in most instances it is destructive of the picturesque."

We may remark here that there is a great difference between artists' architecture and architects' artistic architecture. An old building may have originally been very wretchedly and tastelessly built, but time and dilapidation may invest it with a charm of picturesqueness. In respect to mere artists designing new buildings, we would prefer them not doing so, as far as we would be personally concerned. They would, no doubt, give us picturesque dwellings, externally viewed, but very comfortless and, we fear, very unhealthy ones within. With true beauty or harmony we would like practical utility; and in many instances even the best drawing, perspective or otherwise, will fail to convey to the mind what the building will really be in respect to its position or in effectiveness when finished. In all large buildings, or in those which will reach to a thousand, or two or three or more thousands, a model should be first prepared. The cost of such model will not be money thrown away, but wisely laid out. Had models been made beforehand, many of our present-day public abortions of buildings would never have been erected.

In the preface to "Malton," the questions of health and street improvement are incidentally touched upon—urgent questions a century ago in Dublin, and still urgent ones. The editor writes:—"To promote the health and convenience of a city, wide and clean streets are certainly of principal importance; yet, if by an unforeseen event, a picturesque object should intrude itself so as to impede the view from one end of the street to the other, and an uninterrupted prospect the only advantage to be gained by its removal, it certainly

should not take place, as in the first instance a real beauty would be lost, and it is not certain an equivalent would be gained. Those who have travelled long straight roads may have remarked how tedious they are, and when terminated by any distinguished object, may have observed how completely all relish for close contemplation is lost on the near approach. It is the sudden presentment of any striking object within the just limits of observance that gains lively admiration, and not a long distant view of them; the same is applicable to streets."

Winding thoroughfares in cities may be very picturesque, particularly if the buildings that line them belong to a long past era; but winding streets are not conducive to ready traffic—one of the urgent wants of our day. Picturesque buildings, too, are often found not only to impede the view, but impede locomotive as well as vehicular traffic, and as a consequence they are doomed to give way to straight lines, and perhaps dull uniformity. As a matter of sentiment we dislike very long streets, but a straight street does not necessarily mean a dull, inartistic, and uninteresting thoroughfare. Sameness in domestic buildings can be obviated, and is often obviated by the breaking of their otherwise uniform lines by public buildings. It is not absolutely necessary to preserve a uniformity of height, or style of architecture in street houses, but a great difference in height should be avoided if possible. It would be better also, and advisable, to leave opens here and there in a long line of street not intersected by cross streets—a number of houses forming detached blocks. All very long streets, however, should be intersected by cross streets.

The preface to "Malton," in drawing a comparison between Dublin and other cities, holds that—"Few cities can boast more extensive conveniences, more eminent beauties, than Dublin; in addition to its excellencies, its works of art rival, and in some instances excel, those appropriated to the same purposes in any other country, it is still expanding, and as it were unfolding new lustre. To convey to the curious inquirer adequate ideas of those objects; to diffuse information of a Capital so long undesertly noticed, and to give it that place in the estimation with regard to others it merits, this work was undertaken; whatever it may fall short of its aim in his execution, all the author can advance in its justification is—that he has done his endeavour to make the work worthy the subject, and has performed the task with pleasure; hoping, therefore, for the indulgence, that all human productions claim, and this in particular, he respectfully submits his undertaking to the impartial world."

The above are the concluding words of the preface, but we might have given other extracts from it, suggestive of similar remarks to those which we have made. The volume, as a whole, will most likely be noticed elsewhere in our columns shortly.

The last twenty years of the eighteenth century witnessed the erection of several public buildings, new streets of houses, public improvements of various kinds, and growing encouragement to the development of the fine arts. At the end of the first twenty years of the present century, there was a sad falling off, and the causes have been differently stated by native and other writers. The migration of the most of our nobility and estates gentry to England, where they spent the better portion of the year as absentees, as also their frequent sojourning in continental cities, were, no doubt, some of the chief causes of the decline of art in Ireland, and the neglect of architects and artists.

In 1821, the author of a volume descriptive of Dublin, writes:—"Though Ireland has produced many eminent artists (painters particularly), yet the arts are, comparatively speaking, almost in a state of infancy in the metropolis of this kingdom. There is either a want of sufficient taste amongst the Irish



gentry, or the country is too poor to afford support or existence to professions not absolutely necessary. It cannot be urged that neglect on the part of the government in not patronizing the arts is one of the chief causes operating against their advancement, for no charter or patronizing name would correct the taste of the country if it were impure, or compel the public to purchase thousands of very inferior works for the desperate chance of what some very distant period might produce."

In 1821, it is stated, there were about fifty artists resident in Dublin, among whom no more than five or six lived by the legitimate exercise of their art. As far back as 1764, the Irish artists associated for the purpose of a public exhibition of their works in Dublin. In after years some exhibitions of works also took place by short-lived organizations among the Dublin artists.

In 1768 the Royal Academy of London was founded, but it was not till 1821 the artists in this country were incorporated. The success of the Royal Hibernian Academy has not been very marked on the whole, but that detracts nothing from the merit of the noble idea of Francis Johnston, our native architect. Several of our native artists before and after the Union incorporated themselves with their brethren in London, and not a few distinguished themselves. Among them were Barry, Shee, Mulready, Thompson, Barret, Peters, and others. Some of the above won titles, and lived to an advanced age. In speaking of the above artists and others, a writer already quoted observed in 1821—"Many of equal and some of superior merit never thought it expedient to withdraw from their native city, viz., Hamilton, Ashford, Roberts, and Comerford."

George Petrie, though a young artist at the time, is indicated as one to be numbered among the latter artists who preferred clinging to their native land. As years advanced the young artist became more of a *litterateur* and antiquary; congenial work was found for his pen, and he had less occasion for wishing to leave his native country. H.

#### THE RATHMINES COMMISSIONERS AND THE CORPORATION.

##### *Re WATER SUPPLY.*

Mr. Frederick Stokes, the Chairman of the Rathmines Town Commissioners, has published a letter during the late month in a daily contemporary, accusing the Corporation of breaches of faith on the head of the intended supply of Vartry water to the Rathmines Township. We give an extract from Mr. Stokes's letter:—

"The contract was signed on 2nd July, and ratified by my board unconditionally on the 4th. The Council, having in a very unbusiness-like manner potted over it for nearly two months, have now repudiated it in terms of studied and heedless offence. They will only guarantee 410,000 gallons instead of 1,500,000, and require the same amount—6d. in the pound—to be paid as they had agreed to give us one million for. They have thrown away a certainty, after all reductions, of £1,000 a year for 16 years, and £2,200 a year for ever—not for 35 years—and in addition would have our works and pipes to 5th lock and the new line of pipes from Booterstown, without paying a penny. There has thus been thrown away to the city a capitalised sum of £40,000 to £50,000, if they have the water to sell. There is, however, abundant cause for drawing the inference that they really have neither the water nor the pressure. The latter is abundantly evident, as with every contrivance the supply would only just reach our highest house, if even that.

Mr. Stokes says much more; indeed he assures the public he rejoices at the result, believing that Rathmines has a better and purer supply in the canal water "if not for soap at least for health and life." This is smart writing. The Corporation, not to be outdone in valour, stood upon their dignity at a meeting held on the 27th ult., and after fanning up the embers, passed the following condemnatory resolution:—

"That the council desires to record its emphatic denial of the breaches of faith alluded to in the

letter of Mr. Frederick Stokes, the Chairman of the Rathmines Commissioners, to the *Daily Express* of the 23rd inst., and its condemnation of the coarse, insulting and libellous attacks on the Corporation contained in that letter; and that a copy of this resolution be forwarded to the Commissioners of Rathmines."

Water should not certainly be supplied at a great loss to Rathmines or any other township. Breaches of faith is another question. Many contractors suddenly discovering errors in their tenders, immediately after sending them in, withdraw them. Public bodies, we suppose, believe they are entitled to do the same. The question of a water supply to any township through the Corporation is one that should be well considered in all its bearings beforehand. There should be no guesswork, but a practical calculation of actual and possible expenses, &c. By acting thus much trouble and vexation would be saved, and no charges of breaches of faith would be likely to arise.

#### A WORD FOR CLONMEL, AND OTHER WORDS.

At the meeting of the Clonmel Agricultural Society held during the late month, Mr. Arthur Moore, M.P., in proposing the toast of "Success to the Town and Trade of Clonmel," observed in the course of his address—He had heard that within the last twelve months new works had been started in Clonmel. They were living under a progressive corporation. They were to have a new town hall and fresh supply of water, and if the hospitality of Clonmel was always like what it was now, they might believe him they wanted plenty of good, fresh water. He had heard also that some gentleman out of his generosity, and perhaps partly as a commercial enterprise, was thinking of building labourers' houses. There was no question that whatever might be the condition of the farmers of the country, it was not enough to advance their prosperity, to ameliorate their condition, without paying some attention to the amelioration of the condition of the labouring classes. He was very sorry to say that the Board of Works did not grant accommodation to corporations like that of Clonmel for the building of labourers' dwellings. It was a scandal that Government did not give every facility for supplying such dwellings. The position of country gentlemen in this respect was little or no better. The Board of Works did grant loans to them for such purposes; but the obtaining of these was surrounded by such cumbrous formalities and such an immense amount of red-tapeism that they might as well not be granted at all. This was a most important matter; for if they had not a prosperous and thriving labouring class they would not have a thriving and prosperous farming class. If they had a comfortable class of labourers' dwellings in Clonmel, he believed they might hear again the busy hum of those mills on the other side of the river, which had been so long silent; that their noble river, with its undeveloped sources of health and wealth, would be utilised, and thus the town might be raised to that pitch of wealth and prosperity which they would desire to see, and which he hoped some of them would live to see."

The chairman of the meeting, who is also president of the society (Lord Lisimore), in responding to the toast of his health, had no words to waste on public improvements, being an "out and outer" of the agricultural and live stock interests. The interest (to use his own words) which he had "dearly at his heart" was, he said, the improvement of agriculture and, of course, live stock. Here are his lordship's sentiments in a nutshell:—"But they must be up and stirring; it was all nonsense—they must put their shoulders to the wheel. He did not believe Tipperary was going to be beaten; but, by Jove, they must have good bulls, good rams, and even good turkey cocks." And why not good pigs,

and good geese, and ducks, to enable Pat to pay the rent. We hope his lordship, on the next occasion of his chairmanship, will not forget to remember that good labourers' dwellings are not only one of the wants of the time, but one of the urgent wants of Clonmel, as well as other towns in Ireland.

#### THE DUBLIN DEPUTY SURVEYOR OF THE STREETS.

THE appointment of this official has now been some months under discussion. We will not say, when his appointment is confirmed, that such an official will have nothing to do. No doubt there is work for him if he has a mind to do it as it should be done. It is too often the case in Dublin, however, that officials are appointed—to wit, the main drainage staff—who have "got no work to do," though paid very well out of the rates for doing that nothing. "What are you doing Jim?" "Bedad, I'm doing nothing, sir!" "And what are you doing, Pat?" "I'm helping Jim, sir!" The public as well as the private employer, may find out pretty often that one man or several men are paid for doing a specified work, but when the work comes to be examined, that each and all of the cyo servants have been helping each other to do nothing at the public expense. The following is the recommendation of the committee of the "whole house" on Cork-hill, *re* the Deputy Street Surveyor:—

"That the election shall be during the pleasure of the council, not exceeding one year; that the person elected must be a qualified professional engineer, with practical experience of road and sewer work, and accustomed to the management of large bodies of men; age to be certified in some unimpeachable manner as not less than thirty years and not more than forty years; the appointment to be from year to year only; salary to commence at £350 per year, with an annual increase of £10 each year, if the Deputy Surveyor be re-appointed, up to a maximum of £500; that the Deputy Surveyor shall superintend and be responsible for the proper execution of all work in flagging, paving, macadamizing, watering, and scavenging of the city, and shall also supervise the sewer work therein; to be responsible directly to No. 1 Committee, and report to said committee, these reports to be placed before the council at each monthly meeting."

There is a chance now, we opine, for an active member of the Corporation, not burdened with too much of this world's goods, sending in his resignation, preparatory to applying for the new appointment. Is there any "qualified professional engineer" in the ranks of the civic body? If not, there is perhaps a relative in the cold outside. We think we could put our hand on the likely man who will get the largest number of votes, not of the "whole house" but of a certain conclave thereof—but mum's the word! and we are whispered "it would be a pity to spoil trade?"

#### THE APPRENTICE BOYS' MEMORIAL, DERRY.

THE following appears in the columns of a northern journal, in an article descriptive of the opening of the above-named Hall:—

"The total amount of the building and gasfitting contracts is about £3,350, but the beating and furnishing remain yet to be provided. The architect is to be congratulated on the high professional taste and feeling he has displayed in this most successful work, which to him, associated as his name is with the Apprentice Boys of Derry, must have been a 'labour of love.' The building contractors, Messrs. McClelland and Co., have more than sustained their high reputation in its execution. The plastering, done for them by Mr. D. Creery, and the varnishing, by Mr. James Shannon, are of excellent finish; while the beautiful gasfittings, manufactured and supplied by Shannon Brothers, of Bishop-street, are very creditable to this local firm."

Plans prepared by Mr. Hawkesly for waterworks for Wexford have been approved of by the town council of that borough, and will be carried out forthwith.



## THE TIMBER AND SLATE TRADE.

In their Monthly Trade List Messrs. Richard Martin and Co., Sir John Rogerson's-quay, call attention to a varied assortment of really prime timber, deals, &c. The Riga red deals 9 by 12 are (they say) the best value they have ever been able to offer. Slates have again been advanced in price at the quarries, and Welsh slates of really good quality are difficult to obtain. In addition to their stock they have on the way from Bangor the cargo per "Raven," containing nearly every size from 24 by 14 to 13 by 7 both first and second quality. With the exception of slates, all building materials are moderate in price, and there is a fair demand, and the trade on the whole appears to be in a healthy condition.

## SALE OF A CITY FOUNDRY.

By reference to our advertising columns it will be seen that the extensive old-established foundry known as "Vincent's," in Church-street, is to be submitted to public competition on Monday next by Messrs. Bennett and Son, auctioneers and valuers, of Upper Ormond-quay. To capitalists is offered what is certain to continue, as it has done to the late proprietor, a well-paying and valuable concern, and the like of which is seldom in the market.

## HOME AND FOREIGN NOTES.

The directors of the Munster Bank have purchased the Imperial Hotel, Drogheda, and are having the same altered to suit the purposes of their business.

**TECHNOLOGICAL EXAMINATIONS.**—Amongst the list of successful candidates who passed the examination this year we find the name of Mr. Matthew Mullins, Cork Science School. He obtained second honours in Carriage Building.

**THE "TAYLOR" ART SCHOLARSHIPS.**—It has been announced that the trustees of the will of the late G. A. Taylor, Esq., have settled the terms upon which £90 a-year will be awarded in two Scholarships, and one prize to Irish Art Students.

A new company has just been registered, styled "The Mineral Salts Production and Moorlands Reclamation Company (Limited)," with a capital of £450,000 in £10 shares. It is formed for the purpose of carrying into effect an agreement made with "The Continental Diamond Rock Boring Company (Limited)," for the acquisition of certain concessions granted by the Prussian Government to that company for working mineral land in North Germany.

On Tuesday morning a portion of the rere wall of the house 24 Parliament-street, adjoining the new premises of Messrs. Sheridan, gave way. Some time ago, the entire rere wall of the house 21 came to grief, and has since been rebuilt. The house is still untenanted. A general survey of the dangerous and tottering structures in the city is desiderated, otherwise we fear there will be a sacrifice of life, particularly of the dwellers in tenement houses of four and five storeys, such as those above referred to.

**THE PEOPLE'S PARK, LIMERICK.**—A morning journal, in noticing the opening of the People's Park, Limerick, informs its readers that—"The park is about the same dimensions as Stephen's Green, handsomely railed in, and containing a very handsome memorial drinking fountain, to the memory of Mr. Russell. The fountain, surmounted by a beautiful canopy, resting on Corinthian pillars, was erected at the cost of the people in Mr. Russell's employment. The park itself is very handsomely planted with trees, shrubs, and flowers, and in the centre stands a very handsome column 60 ft. high, surmounted with a statue of the late Right Hon. Thomas Spring Rice, for some time Chancellor of the Imperial Exchequer, and first Baron Montagu, who represented Limerick for several years."

**"HACKNEY EXPRESS" INDEMNITY FUND.**—A meeting has been held in the council chamber of the Shoreditch town hall for the purpose of presenting to the proprietor of the *Hackney Express*, Mr. Joseph Cox, the fund which has been subscribed to indemnify him against the costs incurred in the late action for libel in connection with certain buildings at Hackney Wick. Mr. W. H. Fell, one of the

representatives of Shoreditch at the Metropolitan Board, presided. Mr. Cox was complimented on all sides for the manner in which he conducted his paper, and the chairman presented to him a cheque for £302 4s., the amount of the subscriptions, which will probably cover all the costs of his public-spirited attempt to improve the mode of building small houses in his neighbourhood.

**LIMAVADY WATER SUPPLY.**—The inhabitants of this thriving little place (says the *Coleraine Chronicle*) are likely soon to be in possession of one of the greatest sanitary boons which it is in the power of the legislature to bestow—viz., an overflowing supply of pure water under pressure. The sanitary authority (Guardians of the Union) having obtained statutory powers to enable them to take, in a compulsory manner, the lands and water rights required for these works, have, nevertheless, instructed their solicitor to arrange with all the parties concerned in an amicable manner, if possible. Should, however, any of them prove obstructive, the glove will, no doubt, be removed from the iron hand beneath, as the act vests in the authorities, for obvious reasons, very arbitrary power for such purposes. Mr. Wilson, Limavady, is the solicitor, and Mr. Adair, county surveyor, the engineer for these works, and their names are a sufficient guarantee that justice will be fairly meted out, and no time wasted in bringing the matter to a successful issue.

**MILK TESTS.**—At the Society of Public Analysts' meeting on the 17th ult., amongst the papers read was one "On some Anomalies in the Present Method of Stating the Results of Milk Analysis," by Mr. Thompson, Manchester. A discussion followed the reading of the paper, in which Dr. Muter pointed out the necessity (which he had frequently urged in the *Analyst*) of considering the amount and constitution of the ash of any sample of milk which might be submitted for analysis in addition to the usual examinations for solids not fat. He urged that an analyst should not take any single point in the constitution of a milk as an absolute standard, but should make a thoroughly full analysis and apply common sense in considering the whole of the results. He had himself, on five or six occasions, met with milks containing so low an amount of "solids not fat," that, had he not taken pains to examine the amount and nature of the ash, he might have been led to condemn unjustly. Mr. Allen considered that the addition of water to milk was not only objectionable, owing to the fraud practised, but also from the danger of spreading zymotic diseases by the employment of impure water. The President, in summing up the discussion, remarked that what was wanted was the fixing by Parliament of definite qualities, below which it would be illegal to sell both milk and spirituous liquors.

## TO CORRESPONDENTS.

**CITY EXPENDITURE.**—Pressure of other matter has obliged us to defer our notice of the City Accounts. We will return to the subject on an opportune occasion.

**A SUBSCRIBER.**—You will find all the needed information you require in any "Builder's Price Book," with additional particulars of a kindred nature that will no doubt be useful to you. The price book published by Crosby Lockwood and Co., London, which you can order through any bookseller in this city, will answer your purpose as to labour, materials, &c.

**GOBIAN SAOR.**—We will find space for practical illustrations of your trade, if you can give them—principles and practice; but we have no room for political demonstrations.

**W. B. (Limerick).**—Photograph received. Thanks.

**J. C.**—You can have the back numbers you require, on sending stamps for amount.

**RECEIVED.**—H. B.—J. S.—C. E.—Sanitas.—M. D.—A Citizen.—W. (London).—W. C.—R. A., &c.

## NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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Lease, 240 years.  
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

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## THE IRISH BUILDER.

VOL. XIX.—No. 426.

AN UNEXTINGUISHABLE  
ARCHITECTURAL CONTROVERSY.\*

## SECOND NOTICE.



ASSING over some reiterated charges made by Mr. O'Neill against Dr. Petrie, his fast friends and admirers, and the failure of our late antiquary to fulfil

his promises, though he lived for thirty years after they were made, we come to some test questions which the living admirers of Dr. Petrie are asked to answer. Mr. O'Neill, in his preface, writes:—

"I will not ask these friends to do much. Dr. Petrie was to have proved in the third part of his inquiry four propositions. I ask his friends for proofs of two only—they are at page 359—one: 'That on several of the round towers Christian emblems are observable'—the other: 'That they possess invariably architectural features not found in any buildings in Ireland ascertained to be of pagan times.' At pages 49, 277, 314, 319, 350, 360, 372, 389, 395, 397, 410, 437, 443, 456, that is to say fourteen times Dr. Petrie refers us to his unpublished volume. Those friends who so revere his memory would better honour his character by supplying these numerous desirable matters, than by venting their anger on one who has done his humble best to do justice to his country and his race."

Now, although personal feelings too often intrude themselves in Mr. O'Neill's preface, we are nevertheless disposed to give him fair play and full publicity for his expressions. We are not aware to what extent the members of the Royal Irish Academy, or particularly its council, have annoyed, or injured, or obstructed Mr. O'Neill in the pursuit of his favourite studies. The mere fact of a prominent member of the council declining to subscribe to one of our author's

volumes is not a sufficient cause in itself to feel aggrieved at. On the other hand, if Mr. O'Neill's was a useful work as well as a very handsome book, the fact of its containing a severe criticism of Dr. Petrie's views should not prevent a member of the Academy becoming a subscriber. We shall by and by come to a more distinct charge—that of putting obstructions in the way of a student of Irish history, endeavouring zealously from his own point to throw light on a long puzzling and vexed question. In the meantime we shall quote another extract from Mr. O'Neill's preface:—

"Dr. Petrie hoped that his publication would be the means of showing that ancient Ireland was unimportant and uncivilised. I do not believe in Dr. Petrie's notions respecting ancient Ireland. On the contrary, I believe that the first settlers in Ireland were far above the uncivilised state; and I also am convinced that ancient Ireland was not an unimportant country. These are valuable questions of history. Let the friends who so revere Dr. Petrie vindicate his fame by establishing these historical dogmas of their friend. I fail to see how the building of round towers in Ireland could prove that anciently the Irish were in the condition of savages, or that ancient Ireland lacked importance; and desire more light than their friend's imperfect work affords. Their friend was an artist. Can his admirers venture to tell why he, who knew of the wondrous art works of ancient Ireland, has not praised these works. While the best judges in Europe were enthusiastic admirers, as I have been, of these miracles of Irish genius, Petrie has been silent as a sepulchre about them. Will his friends be so good as to explain this fact and supply this omission? Do justice to the character of your talented friend, by showing that you have brains as well as money. If you use your intellects justly on his behalf you will be esteemed; but by limiting yourselves to acts of petty persecution, you subject yourselves to the grave suspicion that you know his work is tainted with deliberate turpitude, and that the only way to cloak your friend's misconduct is to crush down all who dare attempt its exposure."

In the above extract the reader will see the personal element running throughout, and we fail to see how these constant reminders to the friends, or supposed friends, of the late Dr. Petrie can add any strength to Mr. O'Neill's argument. It is also a folly to think that any member of the Royal Irish Academy, or the Academy *in globo*, can in these times prevent the publication of a new fact or a new truth, were he or they ever so disposed. There is no organisation in the British Islands, from the Royal Society of London down to the smallest local scientific club in this or the sister kingdom, that can hope to suppress a scientific truth, or prevent the exposure of a literary fraud. Some societies may have corrupt councils, and some newspapers and periodicals may allow themselves, for a consideration or some party reason, to write down an opposition disagreeably unpleasant to them, but the truth will out nevertheless, and make headway. If Mr. O'Neill is on the right road, and is conscious of his capacity of solving what many still consider an enigma, and of convincing his countrymen as to the real origin and uses of the Round Towers, let him pursue his work manfully and not bother his head about the opinions of Dr. Petrie's friends. No doubt several of these friends firmly believe the doctor is right, while Mr. O'Neill as firmly believes he is wrong. A long purse and influence is, to be sure, a great advantage to an author appealing to the public for a fair hearing, but Mr. O'Neill is not altogether an unknown man; he has been heard of before, and he is now being heard again, and, as far as we are concerned in a journalistic way, his talents will not lie hid under a napkin.

Now has Dr. Petrie really been as "silent as a sepulchre" about the wondrous art

works of ancient Ireland? This is a fair question, and it should be answered. The late antiquary, however silent he may have been respecting the art remains of Pagan Ireland, has not been silent respecting the architecture of Ireland, the ecclesiastical architecture some centuries anterior to the Anglo-Norman invasion. Of the Round Towers, of course Dr. Petrie believed in their ecclesiastical origin, but that view has been hotly disputed before his time and in his time, and more ably still since his death, by clerics and laymen, architects and antiquaries, and others of both churches. We have ourselves, in a recent series of articles, expressed our opinions respecting the origin of the Towers, and we do not care to go into long details.

We have next some statements in Mr. O'Neill's preface as to the amounts of money expended by the Royal Irish Academy on the head of this vexed question in the matter of prizes, and in reference to this matter the following remarks are made:—

"Above £900 have been expended by the Academy on the essays of Dr. Petrie, of which £725 went into Dr. Petrie's pocket, on account of the essay on the round towers, a work which the Academy accepted as an imperfect production, and which, as administrators of the public money, they are bound to complete. They receive £2,000 a-year grant from the public funds. This society has been a hundred years in existence, and Dr. Petrie is, I may say, the only antiquary of eminence it has produced. The essays on the round towers by Beaufort and Dalton are simply a disgrace to the Royal Irish Academy. Dr. Petrie's essay, in its present state, though of the highest value, is also no credit to that great association, so long as its deficiencies are unsupplied. Its shortcomings are matters of grave suspicion as respects Dr. Petrie's moral character, and indicate remarkable negligence as far as the Academy is concerned."

The above may or may not be considered grave charges according as they may be viewed by different parties. We do not quite see how the Royal Irish Academy is to supply the shortcomings of Dr. Petrie. If that body possesses the manuscript of the promised and concluding part of Dr. Petrie's volume, they ought to publish it or a summary of it, but is such a manuscript in existence? Since the first appearance of Dr. Petrie's book in 1845, a large flood of light has been thrown upon the early history of Ireland, literary and architectural, and the opinions of the council of 1845, are not, as a whole, the opinions of the council of to-day. Members' places are supplied by other members, and though the council, as a whole, may be proud of Dr. Petrie's volume as a contribution to Irish literature and art, it is not likely they bind themselves severally to all he has written. Mr. O'Neill himself considers that Dr. Petrie's work is of the highest value, independent of his own views of its shortcomings, and we are ourselves of the same opinion.

We query much whether Dr. Petrie's moral character *per se* is at all in question in this matter, unless it can be proved he deliberately lied, and never intended to complete his work. Its non-completion may be explained in other ways. He is not the only instance of a popular author beginning a work which he never finished or lived to finish. He led a pretty active life, and we are not aware whether music or art engrossed the most of his time in these few years preceding his death. There are members of the Royal Irish Academy who doubtless could inform the public whether the non-publication of the promised and concluding parts of Dr. Petrie's work was owing to his own desire or

\* "The Round Towers of Ireland. By Henry O'Neill, author of 'The Sculptured Crosses of Ancient Ireland,' 'The Fine Arts and Civilization of Ancient Ireland,' &c. Part First." Dublin: M. H. Gill and Son. London: E. Quaritch; Simpkin, Marshall, and Co. Edinburgh: Menzies and Co. 1877.



to the wishes of the council. Did the antiquary shrink from its production, or did the council taboo the completion of the work? Mr. O'Neill insinuates a good deal, but we would like to have substantial proof of the deliberate resolves of the Royal Irish Academy respecting the incomplete work.

Mr. O'Neill reminds his readers that the Academy, during its century of existence, has produced only one antiquary of eminence. But has it not produced men of eminence in other fields? The standard of eminence varies with the times. Joseph Cooper Walker, in the early days of the Academy, was reckoned by some an antiquary of eminence, and again Ledwich, who, like the former, was a member of the council. Even Vallancy reached a degree of eminence, though his star has paled long since. We might point out other names, but it is not necessary. If the Royal Irish Academy exists for another century, perhaps before half that time another antiquary may rise within its walls, or in connection with it, that will stand forth greatly superior to Petrie in the standard of eminence.

Our race is progressing, our clever men are growing more clever, and with the advance of science men of eminence will appear again and again; but every century will be inclined to fix its own standard for gauging distinguished abilities. Mr. O'Neill's remark about the Academy producing only one antiquary of eminence in a hundred years is only a repetition of what was said upwards of thirty years ago in the pages of the *Dublin University Magazine*, in the same number as we quoted in our last, containing a review of Dr. Petrie's work then published (1845).

In view of what Mr. O'Neill is writing, and also in view of the proposed Science and Art Museum for Ireland, and State endowment for literary and scientific research, it will not be amiss to quote our Dublin reviewer of thirty years since. He thus concludes his article:—

"Having said so much of the Essay as the work of Dr. Petrie, we would now add a word regarding it as connected with the Transactions of the Royal Irish Academy. That learned body has not since its foundation given to the world so much valuable matter on all the topics of antiquity discussed in its transactions, as is contained in this volume. This, it is true, is by no means as distinguished praise as the work merits. As we took occasion to say some time since, it is not very long since the Academy was in two of its departments contemptible. It is but five or six years since it ceased to publish the most insanephilological, or we should say misological reveries. Since that period, however, its Transactions have been distinguished by several essays which have acquired an extended reputation on subjects of polite literature, numismatics, and antiquities, and they now have originated the first work of British antiquities of the age. Within about the same time the Academy has acquired a truly splendid museum of Irish antiquities, and has greatly increased its manuscript library. An archaeological society, the most efficient association of the kind in existence, has also sprung into existence—a child of the Academy—within the same time. If we ask who gave the impulse, who was the restorer of this judicious learning in the Transactions—who was the parent of the museum, the active agent in getting together the manuscripts—the creator of that spirit which, animating other men of perhaps greater learning and activity, and certainly not inferior patriotism, has shown itself in the foundation of the Archaeological Society—we believe everyone acquainted with these matters will answer, Mr. Petrie. These services to the Academy are services to the country; and it is on account of the just and legitimate national advancement to be achieved by such services that we here enumerate them, in order to more pointedly express our regret that the Government of the country has not placed at the disposal of the Academy means sufficient to enable them to take advantage of these labours, without putting the writer, who so generously labours for their fame and for the legitimate advance-

ment of the country, to the risk and expense of publishing on his own account; for we perceive that this volume, instead of being printed as it ought to be at the cost of the Academy, has been published by Mr. Petrie's private bookseller—the funds of the Academy not enabling that body to undertake a work necessarily so expensive. Certainly the leading literary society of Ireland ought not to be left so ill provided. Three hundred pounds a-year to such an institution is by no means adequate to its legitimate wants. It is just one-hundredth part of the amount of public money annually granted to an institution having nearly similar objects in London. We do not grudge or repine at the liberality of the nation to the latter establishment—let the British Museum flourish as a repository of everything that is worthy of the metropolis of the greatest empire of the world; but let not the second city of that empire be left so meanly supplied with those advantages which her sons have shown themselves so able and willing to employ to the promotion of peaceful learning and the advancement of the British name in the republic of letters."

The reading of the above extract will, doubtless, suggest some thoughts to Mr. O'Neill, and possibly to the members of the Royal Irish Academy at the present time. In respect to State aid, the Academy is on a far better footing in 1877 than it was in 1845, and many changes have taken place for the better, though we have our misgivings concerning the forthcoming Government scheme. Mr. O'Neill thinks that the Academy has done very little for its time, and is at present doing very little for the support it receives. He points out that Mr. Adams, of Belfast, has published several volumes of Irish archæology, and the Rev. James Graves, of Kilkenny, several more on the same subject. These two gentlemen, he says, have in a few years, without any Government aid, done more work for Irish antiquities than the Royal Irish Academy has effected during its existence.

From first to last the burden of Mr. O'Neill's preface is an impeachment of the Royal Irish Academy. The essays it has published on the Round Towers are, he holds, unreliable, and that the system of that society is erroneous; and further, that the work of Dr. Petrie does not furnish facts which are, in his opinion, indispensable to a proper understanding of the vexed question, or to the forming a proper judgment respecting the many conflicting theories which have been proposed to explain their use.

The facts which are indispensable our author undertakes to supply. We shall be very pleased to see them, for we have waded through all that has been written from time to time on this most perplexing Round Tower subject. Every author we have read is convinced in his own mind that his is the right theory. It was treason in national ranks and ecclesiastical circles for some years after the publication of Dr. Petrie's work to say that the Round Towers were other than Christian in origin or uses. It is now becoming a heresy to hold that they are other than Pagan, yet in their erection exhibiting a high state of civilisation. We confess we lean to the side of the civilised Pagans, and we are inclined to think that they have entrenched themselves in such safe positions that it will be a matter of some difficulty to dispossess them. We are likely to return again to the subject.

Electric candles are, it is said, the latest novelty. The attempt will be made during the winter to light one of our theatres by this means, and it is hoped that the process will produce a clearer and a cooler light than we now enjoy, or rather suffer from, in all our houses of entertainment. They are now being used at Stoberscross Docks, Glasgow, to enable the workmen to carry on operations at night. So far the experiment has been a success.

## NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

### SIXTH PART.

In our first paper we gave a brief notice of the printing and publishing trade in this country in connection with almanacs, but we will now enter a little more fully into the surroundings of that enterprise. We mentioned that as early as 1587 one William Farmer printed an Irish Almanac in this city, and with some intervals from that period down to our own time the printing and publishing trade in almanacs of all kinds was a brisk one, and some of our Dublin printers and publishers who made a speciality in that line of business realised large sums of money. From the middle of the eighteenth century till the first twenty years of the present one, the almanac business saw perhaps its most prosperous days. Weather prophets abounded, and "true editions" and piratical editions in book and sheet flooded the market, the English contesting with the Irish. The compilers of many of our native almanacs were schoolmasters and mathematicians, but the demand for these works brought into the field a number of illiterate men of the operative class, whom the regular compilers and philomaths looked down on with contempt. The pretenders, however, held their own for a considerable time, for what they lacked in knowledge they made up for in assurance. In the middle of the last century, and indeed for several years later, our almanac compilers did not hesitate to describe themselves as astrologers. The fixing of the time of the tides, the moon's changes, and the appearance of eclipses, were only part of their labours; but they were not content at keeping to the practical, but boasted of their powers of foretelling future events. A lucky coincidence in this line was often the making of an astrologer, and as the farmers, peasantry, and the working and lower classes purchased largely in the almanac line, a lucky hit was sure to raise up the next year's sale considerably.

The Dublin almanac publishing trade some time after the middle of the last century came chiefly into the hands of Jackson and his son, printers, Meath-street, and after their deaths, their successors became the sole proprietors, by death, purchase, relinquishment, or resignation, from the authors or assignees. A very interesting volume could be written on the almanac printing and publishing trade in Dublin, and the quarrels and law-suits between rival compilers and publishers. "An Historical Account of Irish Almanacs" was indeed written to some extent in the early years of the present century by one Patrick Lynch, one of the editors of our Dublin almanacs, and a man of respectable ability.

Our Irish almanacs of the last century, like the English ones, had a few pages set apart for mathematical questions and their solutions, with poetical effusions, comprising enigmas, rebuses, and riddles; and, before the era of Dublin penny journals and cheap literature generally, no doubt this almanac literature diffused a taste for science and knowledge to some extent among the lower classes.

For superintending the scientific and poetical department of his magazines, Jackson employed a Mr. Wade, who appears to have been a weaver; but love of strong drink shortened Wade's merry life, and the management of the poetical and scientific department was given to one Mark Morton or rather Moran, a native of the Queen's County, and of the farming or agricultural class. After Jackson's death, some time early in the last decade of the last century, the copyright and printing materials of these almanacs were purchased from his executors by Patrick Wogan, a noted and wealthy publisher, of "Old Bridge" and Ormond-quay.

Before passing on to notice the future publishers of our almanacs, we may mention here that Robert Jackson, of Meath-street, was a somewhat noted bookseller and type-



founder in the last century, and that he printed and published a variety of works, and several of an educational kind. Some of his books were reprints of London editions, but others were by native authors. Dr. John Rutt's "Essay towards a Natural History of the County Dublin," in two volumes, was "Printed for the Author and Sold by W. Sleator, in Castle-street, and R. Jackson, in Meath-street. 1772." We believe that Jackson printed some other of Rutt's works. He also printed about the same period "Practical Book-keeping, after the True Method of Dr. and Cr., by way of Double Entry; upon the System of the late ingenious D. Dowling, gent. By William Jackson, accomptant. To which is added a new piece on Exchange, in two Tables"; "The Elements of Euclid, with select Theorems out of Archimedes. By the learned Andrew Tacquet. To which is added Practical Corollaries, shewing the Uses of many of the Propositions. By William Jackson. With an Appendix of Practical Geometry. By S. E. The Tenth Edition." Jackson also issued a variety of copy-books for the use of schools, and among these are announced "A New Copperplate Copy-book, in Quarto, being an Introduction to the Art of Writing, or select Examples of Penmanship performed by several of the most eminent Masters, and engraved by D. Malone"—a native engraver, we presume, at the time. Rutt's volumes, whether printed by Jackson, or Sleator in Castle-street, are very well turned out for the period—paper, typography, and binding.

But to return. A very short time after Wogan came into possession of Jackson's almanack plant, Jones, a bookseller in Thomas-street, published a piratical edition of the almanacks. The calendar of these was compiled by Morton or Moran, the mathematical and poetical department being conducted by a person of the name of Sally, who was acknowledged to be "a gentleman esteemed for his candour and honesty, while his former correspondence in the Irish diaries, evince his abilities as a mathematician, and an intelligent scholar." This character is given of him by Patrick Lynch. We learn in a few years that, in consequence of Jones's piratical edition, as also the stamp duty and the annual establishment of similar almanacks in Belfast and Cork, Wogan's diaries did not sell so extensively as formerly. Another cause was said to be bad management of the compilers in conducting the mathematical and poetical departments of the almanacks.

In these days of sound elementary and technical education it is worth while quoting the remarks of Patrick Lynch as to the scope of almanacks, and what might be expected from their proper management, as also what the Government of the day should do, but did not, for it was interested then and many years afterwards, not only in taxing knowledge in almanacks, but in magazines, newspapers, and books. "Since the first insertion," writes Lynch, "of arithmetical questions in these almanacks a little after the commencement of the last century, it is scarcely conceivable what an instantaneous influence they had in diffusing a taste for those useful sciences over the nation at large. By these annual publications a laudable spirit of inquiry and emulation was excited even among the country farmers; and mechanics, weavers, taylors, shoemakers, soldiers, flax-dressers, and tradesmen of all descriptions became able mathematicians, nay, eminent professors of the science. How impolitic, then, was it in a legislature commiserating the national ignorance and repeatedly professing its promptitude to establish a system of education for the Irish people, could but a feasible plan be devised, to lay a prohibitory tax of ninepence on a sheet of paper originally sold for threepence to sixpence, and thus prevent the expansion of knowledge by means of that annual vehicle throughout the nation." It was hard, indeed, that the country farmers and mechanics could not be let enjoy their annual publication without having it weighted

down by what amounted in several cases to a prohibitory tax.

Apart from the arrant trash of an astrological nature contained in these Dublin almanacks, they afforded some instruction and amusement to the humbler classes in years when there was little or no schooling to be had cheaply for the poor man's child. Laboissiere, the predecessor of Jackson, or rather the schoolmaster who conducted the former's almanack, was in the habit of inserting a number of his pupils' names in his almanack, and their supposed problems and effusions. Moran continued to do the same thing. He graced the catalogue of his contributors with the name of his father as William Morton, Esq., and his infant son, *Sir Isaac Newton Morton, Esq.*, followed by other names of illiterate persons. Morton's or Moran's management of Wogan's almanacks appears not to have added to their reputation or sale, coupled with other causes already alluded to.

About 1809-10 Wogan entrusted Patrick Lynch, then of Usher's-court, with the compilation of his almanack. Lynch carried out a number of reforms. To guard against partialities, and from favour or private attachment, as he tells us himself, he transcribed the mathematical correspondence, and submitted a copy without the authors' signatures to the perusal and examination of three gentlemen unconnected with the correspondence, but distinguished for their acquaintance with the various branches of mathematics. Instead of substituting a compilation of his own respecting the tide-tables of Dublin Bay, he adopted tide-tables calculated and obligingly communicated to him by the Rev. Dr. Bernard M'Mahon, a Catholic clergyman of the then Hardwicke-street chapel—the chapel of the Order of Jesuits before the building of the Gardiner-street one. The tables prepared by Dr. M'Mahon were, we are told, "formed on principles deduced from a system of experimental observation made by the doctor in the harbour these many years past with an apparatus ingenious in invention, simple in its contrivance, and extremely accurate in determining the local phenomena of the tide of this bay, must be considered preferable to any calculation derived from the general and still imperfect theory of the oceanic tides." The tide-tables hitherto compiled for Wogan's almanack by Morton or Moran, as also by him for Jones's pirated edition, differed materially from those calculated by Dr. M'Mahon. Taking one instance alone on the first page of Jones's edition, and comparing it with that of Wogan's or Stewart's, calculated by Dr. M'Mahon, the large difference of one quarter to three quarters of an hour will be shown in each tide from the 7th till the 31st of January. Lynch lamented that vulgar prejudices rendered it necessary for almanack vendors to retain foolish observations on the weather. He collected in his editorship what he calls "a system of rational prognostics from the writings of the most eminent philosophers of the present age." He composed them in familiar verses, and inserted them in Wogan's diaries.

Ill feeling very soon manifested itself between the rival almanack compilers. Morton did not like to be superseded by Lynch, or see his talents suffer in the public estimation. In July, 1810, Morton instituted an action of trespass in the Court of Exchequer against Wogan, the publisher, of 15 Lower Ormond-quay. The plaintiff is described as "Mark Morton, of the City of Dublin, Mathematician and Calculator of Almanacks," who laid his damages at the not modest figure of £2,000. The case was tried before the Right Hon. Standish O'Grady, Chief Baron of the Court. The trial throughout was a very amusing one, from the speeches of the counsel and the evidence tendered on both sides. A full report of the case "*Martin v. Wogan*" would prove interesting to booksellers, publishers, editors, and authors, in the present day. The counsel for the plaintiff made a long, and, of course, eloquent speech, describing his client Morton or Moran as a gentle-

man eminently distinguished for his profound skill in natural philosophy and mathematics, that from an infantile age he made astronomy the more immediate object of his investigation; that by his profound practical knowledge of this sublime science he was enabled to calculate almanacks with mathematical accuracy and precision; in consequence of which he had been employed for calculating and editing the almanacks of Ireland, and was in that capacity engaged these many years past by Mr. Patrick Wogan a wealthy bookseller of this city. Counsel goes on to state that, in consequence of his client's wishes to have a pecuniary compensation more commensurate with the labour and skill necessary for editing these almanacks, and also with the enormous profit accruing to Mr. Wogan from the sale of his client's works, Mr. Wogan ungenerously refused a compliance with his just demand, and also employed another in his client's stead for editing last year's almanacks. That this substitute's ignorance and incapacity was so gross as to confound the harmonious system of the heavens by heaving the planets out of their orbits, driving them to and fro, not excepting the great and glorious luminary of the day, which he hurled 400 miles out of his course. To this bungled edition, the publisher, Mr. Wogan, no doubt (continues the counsel) for ensuring the sale of the vile production, retained the name of my client, Mr. Morton, as the author and calculator. For this injurious treatment, to the honour, debasement, and depreciation of his character as a scholar and as an astronomer, my client now appeals to the decision of an honourable jury, with a confident reliance that they will punish this wealthy delinquent, and award Mr. Morton the full extent of the damages which he has moderately laid at £2,000.

After an animated appeal to the feelings of the jury, Morton's counsel proceeded to examine witnesses in his behalf. A Mr. Farrall deposed that he knew some of the mathematical sciences, and that he taught them during the evenings; said that in Wogan's almanacks of this year he found many errors. In his cross-examination he acknowledged he was a painter by trade; that he was not acquainted with astronomical instruments; that he never took an observation; and that he often drank in the plaintiff's (Morton's) company.

A Mr. Crosby was next examined. Said he knew Morton; denied being his scholar, but afterwards acknowledged he was under Morton's tuition. Said that his withdrawing from Morton's tuition was solely caused by the many errors he himself found in Wogan's almanacks, for otherwise he should have more of his (witness's) money. In cross-examination witness owned he was bound to a carpenter; was not acquainted with astronomy; left Morton, and afterwards went to Mooney's school in Marlborough-street. On being asked why, replied, because he was informed by a great many good judges that he was the best mathematician in Dublin. "A very good reason, my lad," observed the defendant's counsel.

The Rev. Bernard M'Mahon, of Hardwicke-street chapel, on being sworn, said that he merely knew Mr. Morton; of his literary abilities and knowledge he knew nothing, except by common report; could not take on him to appreciate Morton's competency; knew Lynch, the last editor of Wogan's almanack; cannot appreciate his mathematical knowledge, but believes Lynch to be a good Latin and Greek and classical scholar; that since the first publication of the Nautical Almanack in England the calendars of the Irish almanacks are taken from it, and, by the assistance of Dr. Maskelyne's Requisite Tables, fitted to the meridian of Dublin; that all this required no extraordinary knowledge of mathematics; owned that he would not wish to have his name to an erroneous publication.

Mr. Mooney, the Marlborough-street schoolmaster, said he was a professor of mathematics; knew Mr. Morton. "Then



you must know him to be a famous mathematician?" To which Mooney replied, "Only by report." This closed the plaintiff's evidence, which was certainly not much in his favour.

Prime Sergeant M'Mahon then replied for the defendant; described it as a most extraordinary case, and a plan contrived and concerted by indigence against opulence—a scheme for wresting from his client, Mr. Wogan, that well-earned wealth acquired during the long course of a laborious life, in the persevering habits of industry, moral virtue, and attention to business. The Prime Sergeant went on to give a delineation of the plaintiff's moral habits, convivial compilations, and lunar flights. He showed that the vaunted errors in the little almanack affected not its utility, and directed attention to the evidence given by the Rev. Dr. M'Mahon. In conclusion he said that the cancelling of Morton's name from the standing form of the little almanack was to be attributed rather to the neglect of the printer, or the mere inadvertence of the corrector, than to the real intention of Mr. Lynch; was unequivocally clear, by Lynch's erasing Morton's name from the two larger almanacks, as well as by his candid addresses to the public in both these publications. At the conclusion of a forcible address, the Prime Sergeant proceeded to the examination of witnesses.

Mr. Lynch deposed that he, conformably with Mr. Wogan's special orders, cancelled the name of Morton from the copies of the almanacks prepared by him for the compositor, and that the continuation of Morton's name to the small almanack was altogether unintentional on his part. In cross-examination, said he was born near Ennis; was educated for five years under the Rev. Mr. Hare at Cashel; was twenty-two years superintendent of the principal school at Carrick-on-Suir; some of his scholars in the various departments of the law, now in court, could attest his moral conduct there; knew astronomy, and compiled an almanack for Mr. Stacy of that town; was perfectly conversant with the tables necessary for such calculations.

A Mr. Sweeney, who was next examined, said that Wogan, his employer, gave Lynch particular orders to cancel Morton's name; that the mistake of Morton's name was occasioned through the omission of the printer; that after working off the impression, he showed Lynch the small almanack with Morton's name, by Mr. Wogan's orders; that Lynch said he did not consider it of any importance.

The Right Hon. Chief Baron then summed up, and commented on the evidence, and left the case to the decision of the jury, who, after a few minutes, returned with a verdict of £10 damages for the plaintiff, Morton—a great fall, truly, from the £2,000 sought!

We have now furnished a summary of the trial of Morton v. Wogan, and we have done so believing that, in connection with our notice of printing and publishing, some account of this trial will help to throw a fuller side-light on the history of Irish almanacks and almanack compilers and publishers than is generally known.

The following is a dropped paragraph from our last article on the above subject:—

Joseph Walker had a printing establishment for several years in the last century at 14 Anglesea-street; and Henry Walker and Thomas, already mentioned, were stock-brokers as well as booksellers in Dame-street. Whether Joseph Cooper Walker, the antiquary, was of the same family, we are unable to say as we have not ourselves traced the family tree. We have heard, however, that John Walker, a man of considerable learning, and in this city a fellow of the University of Dublin, and the founder of the sect known as "Walkerites," and John Walker, the English lexicographer, who lies in St. Pancras Churchyard, London, not far from the grave of the celebrated Rev. Arthur O'Leary, our

countryman, and other Irish and English literary celebrities, were of the same family tree as the first-named Dublin Walkers. In the old Roman town of Ilchester, Somerset, or rather its suburb Northover, another John Walker, a native of Dublin, a man of learning and once a tutor of considerable ability, lies buried. In the same Northover Churchyard lies Miss Walker, a daughter of the above John Walker, a lady of considerable scholastic accomplishments, and who conducted a lady's school for several years at Ilchester, in which some of the daughters of Irish gentlemen and Dublin merchants received their education. The Irish Walkers, from the time that the Rev. George Walker, the celebrated Irish divine, defended Derry, down to our own times were noted for learning and literary attainments. The Irish Walkers were mostly of the Protestant faith, but John Walker, the lexicographer, at the close of his life embraced the Roman Catholic faith. He was English, born about 1732, and died in 1807.

#### THE NEW NATIONAL BANK, WATERFORD.

THE illustration which we give with present number is a perspective view of the National Bank, Waterford, which has been erected from the designs of Messrs. Brett and Sons, architects, 49 Dame-street, Dublin. The builders were Messrs. John Ryan and Sons, Bolton-street, Waterford.

The materials of which the building is constructed, up to the level of first floor window-sills, are limestone with Aberdeen granite shafts, and Portland stone caps and bases. The front over first floor is faced with Bridgewater brick, moulded bricks being used in jambs and arches of windows. The shafts are of limestone, with caps and bases, and also the bands, strings, and imposts, of Portland stone.

The carvings have been executed in a highly artistic manner by Mr. Joseph O'Reilly, of Cork; the ironwork by Mr. A. Webb, of Belfast.

#### THE IRISH SLATE TRADE.

THE report of the directors of the Killaloe Slate Company, read at the last half-yearly meeting of that body, states, among other matters, that the production has been more than maintained, the value of the slates raised during the period under consideration amounting to nearly £6,000, which is in excess of the average yield, but on the other hand the amount paid for labour has increased in a still greater proportion than has the out-put, and the directors have endeavoured to impress upon the officials of the company, whose duty it is to watch narrowly over each item of outlay, that whilst it is the earnest wish of the board that every man in the company's employment should be paid a full and fair day's wages for a fair day's work, that there is a limit beyond which expenses cannot with safety be increased, regard being had for the permanent stability of the company and its consequent power of giving continuous employment and the upholding of the dividends which the proprietors have a right to receive on their large outlay. They trust that in this respect the succeeding accounts will show more favourably than do the present. The net profit for the half year, after deducting all expenses, amounts to £941 18s. 4d., out of which sum the directors recommend a dividend at the rate of eight per cent. per annum, free of income tax, which will absorb a sum of £896, and they recommend that the balance, £45 18s. 4d., shall be carried forward to the balance of undivided profits.

Some remarks made by the chairman at the meeting are worthy of notice, more particularly as the slate trade is a building interest of much importance. This country has been for long years importing large quantities of different kinds of slates, and

but little attention has been turned to resources existing in various localities at home. The chairman said that slate-making was going on very prosperously, though there were a good many practical difficulties in the way. The weather was so wet as to cause a flux of water which for some days stepped the action of the pumps at the bottom of the quarries, and this of course to some extent diminished the out-put. It would be seen, however, that the quantity of slates made during the last six months were not less than before, and he hoped that if they did not increase the quantity they would not lessen it. He should remark that the slate trade was not as prosperous in the past half year as before. The differences between the employers and employed in North Wales had thrown a vast number of men out of work, and the men, being very sturdy in their views, had only partially gone to work again. This was the state of affairs at the Penrhyn quarries, North Wales, and the result had been an increased price for slates during the half year. With the increased supply and the quantity of Welsh slates thrown on the market at Limerick, prices could hardly go up, but he hoped they would be maintained. He was happy to say that they were always able to sell the quantities of slates raised, and he might mention that the Killaloe quarry was developing a branch of slate trade hitherto unrivalled, namely—the sale of small, strong slates. This description of slate had been almost worthless to them; it would be thrown away in Ireland as useless, but the canny Scot knew its value, and they were now sending considerable quantities of it to Scotland and also to the south of England. He trusted that the demand would continue, as the result would be beneficial to the shareholders. When they remembered the fluctuations of the slate trade, the difficulties caused by rain, and the condition of the labour market, he considered they had good reason to be satisfied with their dividend of eight per cent.

One of the speakers at the meeting stated that he heard that an opposition company was about to start in the neighbourhood. We see that a Cork Slate Company is advertised in the daily press, and several of our English friends have agents over here. The Killaloe Company might push their wares a little better, for there are several places in the kingdom where they are not used, although the company declare they have a ready market for all the slates they raise. Before the close of the meeting the chairman stated that as a matter of fact, there had been no company started to work a quarry near theirs. Some canny Scotchmen came to look at it but went away again with their money in their pockets, and were not likely to return. They had no necessity to advertise nor to open depôts, which involved needless expense. For the past twelve years they had been vainly trying to get Welshmen to reside at the quarry. Those whom they induced to come over on paying their fares turned out to be the worst class. They were drunkards, and were unable to do as much as the Irishmen. At present they had fifty boys aged from ten to fourteen, called "sniggers," the sons or near relatives of their workmen, and they were training them to make slates. The men would only work when they liked. Much against his will, publichouses had been opened near the quarry, the magistrates having granted licenses against his strongly-expressed dissent, and in those houses the men wasted many an hour that should be devoted to their work.

It is possible that the Welshmen who refused to settle down at Killaloe did not meet the same comforts there that they found in their own country. Although, said the chairman, the company did all they could to promote the comfort of the Welshmen, yet they levanted. We would advise the company to do all they can to promote the comfort of their own countrymen, and they will likely find their quarries better worked, and the Irish tradesmen more prosperous.



## TRADES UNION CONGRESS.

THE tenth annual Trades Union Congress will be held at Leicester, on Monday next, and following days. Among the subjects for this year's discussion are:—Co-operation and its relation to Trade Unionism, Representation of Labour in Parliament, Overtime and Apprenticeships, Conciliation and Arbitration in Trade Disputes, and what should be the bases upon which an arbitration should decide the question of an advance of wages. This programme does not exclude revolutions and debates on kindred questions.

The Parliamentary programme for the session of 1878 includes the following:—A bill to amend the law of compensation in cases of accidents, so that workmen, or their families, may recover from an employer in the event of injury or death from accidents due to negligence. To secure the passing of the Government bill to amend and consolidate the laws relating to factories and workshops. Reform of the magistracy, and the consideration by Parliament of what limit shall be placed upon the summary jurisdiction of Magistrates, which deprives citizens of the right of trial by jury. The mode of appointing unpaid and unqualified magistrates. The irregularity with which the law is administered by the magistracy. The codification of the criminal laws. Reform of the jury law by lowering the qualification for jurymen so as to admit a large number of workmen to the discharge of the important duties of jurymen, and thereby prevent the necessity of men serving as jurors so frequently, and provide reasonable payment for loss of time. The extension of the Employer and Workman Act, 1875, to English seamen whilst in British waters. Reform of the Patent Law. Abolition of Imprisonment for Debt. Compulsory certificates of competency for men in charge of steam engines and boilers.

## ADVERSARIA HIBERNICA,

## LITERARY AND TECHNICAL.

IN these archaeological days, perhaps the following bit of information from a Dublin magazine of 1793, will waken an old memory, and set some provincial antiquary a-hunting:—"A few days ago the labourers throwing up an old fosse round the new church of Kilberry, in the County Westmeath [query Kilbixy], now building by the Right Hon. Lord Sunderlin, discovered a subterraneous passage, and on following it by his lordship's directions, they came to a number of cells, some oval and others circular, from 18 ft. to 6 ft. in diameter, with small arched entrances from one to another. These cells are of rude masonry, with small horizontal funnels from each supposed to admit of air; the use of these we are at a loss to judge; they now cover over a quarter of an acre of ground, and new discoveries are making every day."

We do not remember in the course of our reading to have met with any account of ancient buildings in Kilberry (?), nor have we heard what was the final result of Lord Sunderlin's excavations in the last century. There is a Kilberry in Kildare and another in County Meath, but there is no place of that name in Westmeath, so far as we are aware of. We think the place must have been Kilbixy in Westmeath, as a church was erected in that parish by Lord Sunderlin towards the close of the last century, to which he also presented an organ. Richard Malone, Lord Sunderlin, had a town residence in Sackville-street in this city during the era of the Irish Parliament, and his country seat was Baronstown, County Westmeath, which was built by the Right Hon. Anthony Malone.

In many of our Irish parish churches as well as our cathedrals, there were sepulchral monuments of good workmanship, and of elaborate design. Those belonging to the latter end of the sixteenth and to the seventeenth century were mostly Classic in design, or a compound of Classic and Gothic. Vandalism

and other forms of spoliation, alteration, and "restoration," have destroyed these monuments of the past, and but comparatively few perfect specimens remain. Some of these have been illustrated, and others still remain undrawn. Although many of our sepulchral monuments are not of a very high order of art, yet age is adding to their interest, and it would be well if some one would undertake the task of giving us a series of illustrations of these monuments of a representative character.

The Aylmer monument, erected by Sir Gerald Aylmer, the first of that branch settled at Donadea in the County of Kildare, has been illustrated in a Dublin periodical upwards of eighty years ago. When described in the same pages it was situated in a chapel containing the family vault, adjoining Donadea Church. The following description will afford the reader an idea of this Irish sepulchral monument executed in the beginning of the seventeenth century. On the vertex there is a winged death's-head, and on each side a pinnacle, the one bearing, in basso-relievo, the Aylmers, and the other the Nugents arms. In the front of the pediment are the Aylmers arms with a helmet for the crest. On the frieze of the entablature are two tablets; in that of No. 1 is this inscription, in Roman capitals:—

"Stay, passenger, thy hasty foot,  
This stone delivers thee  
A message from a famous twin,  
That here entombed be."

Tablet No. 2 contains:—

"Live, for virtue passeth wealth,  
As we do find it now;  
Beauty, riches, and worldly state,  
Must all to virtue bowe."

On the dado over the sarcophagus are two niches, containing the effigies, in alto-relievo, of Sir Gerald and his lady, with their son and daughter. The figures are dressed according to the mode of the age they lived in. Sir Gerald is in the full labelled coat with double row of button-holes; the sleeves are also trimmed with mitred loops and buttons in each angle, from the wrist to the shoulder, being what was then called a full trimmed doublet. His son is in the same dress with the addition of a short mantle and hood worn by children. Lady Aylmer is dressed in the kirtle and mantle made close by a girdle. Her neck and bosom are covered by a collar and falling ruff, from which hang a chain and cross, and another cross from the girdle. Her hair is plaited and turned up behind. On the top of the head she wears the roll or cushion to which the veils are pinned. Her daughter is in the same habit except the crosses. The middle pilaster of the niches is ornamented in basso-relievo, with military trophies, and others with sepulchral embellishments. Between the archivolt of the niches are the Aylmer arms, quartered with those of Nugent, and under the arch No. 3 is the following inscription:—"Pray for the soul of dame Julia Nugent, daughter of Sir Christopher Nugent, Lord Baron Delvin, and wife to Sir Gerald Aylmer, Knight and Bart., by whom she had issue Andrew Aylmer and Julia Aylmer. She deceased the 10th of November, 1617. In No. 4 under the other arch is the following:—"Pray for the soul of Sir Gerald Aylmer, Knight and Bart., who built this chapel, tomb and monument, with this church and chapel adjoining. Deceased the 19th of August, A.D. 1634." On the plinth of the sarcophagus are four niches containing figures in alto-relievo of the four great fathers of the church: St. Hyom, St. Gregory, St. Ambrose, and St. Augustine. Under the monument is the family vault. The family of the Aylmers in Ireland is very ancient, and is said to be of Cornwall descent. Their settlement in this country dates as far back as the reign of King John, and some members of the family figured conspicuously in history in troublous times.

A volume of poems by the Rev. John Anketell, A.B., Curate of Donaghendry, County Tyrone, was published by Porter in

Dublin in 1793. The work contains a number of poems on several subjects, and the volume is dedicated to a Mr. Stewart, of Killymoon. Mr. Anketell's volume was published by subscription, and from the address to his numerous subscribers he appears to have inherited a portion of the satiric ire or the power to blight possessed by the Irish bards, of which power we have given some account in some former notes, and particularly in relation to O'Kelly, one of the last of the race, whose "Bardic Visitation of Connaught and Leinster" was published in 1812. O'Kelly secured a number of subscribers for his book more through fear than love, and many of those who refused to subscribe he pilloried in his pages.

The Rev. Mr. Anketell appears to have had a large family, and he is conscious that he possessed a good deal of literary talents, though to read his book in the present day his talents appear rather small. Our author laments the little notice taken of him for a number of years, and remarks on the indifference and inattention of the inferior clergy of learning and merit, and the cruel indifference of bishops and parliament to their slender support. Of course Mr. Anketell never dreamt of a disestablished Church in Ireland. He intimates in his work that, if preferment does not speedily come for him, he will lay aside his clerical and betake himself to some lay employment in America—a very wise resolve, but we are unaware whether he carried it out. Like O'Kelly, the Rev. Mr. Anketell appears to have gone on a bardic visitation from house to house, and was indefatigable in collecting subscriptions. As was to be expected, by some he was warmly received, and by others coolly. This raised our poet's ire, as we are furnished with evidence in his volume anent some exalted personages in the land who fell far below the standard of generosity or humanity in Mr. Anketell's estimation. Three noble lords presiding over Irish courts of justice are in the black list for their illiberality. The Marquis of Downshire, Lord Northland, and Lord Cloncurry are, in the eyes of our poetical curate, the reverse of gentlemen. His language is very angry, though not reaching to the character of Billingsgate.

We will here give a specimen of Mr. Anketell's poetry for comparison with William Carleton's description of similar characteristics. The following lines are entitled the "Stramore Patron." They are amusing, but commonplace, and not above mediocrity:—

"Here Oonah stands; you see her pumps are new,  
Her gown, striped linen, and her stockings blue.  
Last week, in Glaslough, were her buckies bought—  
How bright they shine, though purchased for a groat!  
With three-cocked hat, and smooth-comb'd flowing hair,  
Her partner Paddy hands along the fair.  
His brogues half-soled, and at every bound  
Their firm nailed heels imprint the beaten ground.  
Dolly with care her scarlet cloak displays,  
Laced tightly in her mistress's cast-off stays,  
While Laughlin struts, and seemingly looks big,  
With coarse black stockings, and his one-row wig.  
Here Peggy skips, dressed in a yellow gown,  
Which cost in Shernagereah just a crown.  
New cap and ribbands set her off with grace,  
And add fresh honours to her rosy face.  
While Denis smartly trips along, to show  
His sheep-skin breeches, bought some weeks ago.  
With nimble step see Bridget next advance,  
And gladly enter on the pleasing dance;  
A new green petticoat proclaims her fine,  
And gloves and ruffles render her divine.  
Laurence beholds her with a lover's eye,  
And "cuts his capers" as his sweetheart's nigh,  
Displays his bath-rug coat with artful care,  
And laughs with joy to see her fondly stare.  
There Sheelah moves with awkward sheepish mien;  
Her handkerchief and apron, though, are clean.  
And then who can unmoved, uncharmed, withstand  
The penny ring that decks her yellow hand!  
Terence the lightning of her eyes receives,  
And swears that for her alone he lives;  
While his red waistcoat shoots a pointed dart,  
Which pierces her, kind fair one, thro' the heart.  
I could recount a hundred other names  
Of rustic youths and fresh-complexion'd dames,  
Whose native beauties feel no sinful paint,  
Whose blooming cheeks no borrow'd colours taint;  
But as some palates squeamishly are nice,  
Ev'n these few characters may now suffice."

Many a poor curate since Mr. Anketell's day experienced indignance, and wished that he had never entered the Church, for preferment only came through patronage, family and political influence. The curate, turning author to increase his income and support a large family, may be seen now as well as in the last



century, but it takes a high order of poetry in this last quarter of a century to make the pot boil with some good effect. Poetry of the standard of the "Stramore Patron" will not bring in the "needful," and hard-hearted publishers decline to publish books from new or unknown hands, except at the authors' cost. On the other hand, if a book of poetry or prose makes a "hit," our modern publisher is fully alive to the desirability of securing the copyright.

In the Irish Commons Journals for 1662 Sir John Ponssoby reports from the Committee of Grievances that a bill should be brought in to encourage the killing of wolves and foxes. The country must have suffered severely from the depredations of these animals even at that time, though wolves in Ireland are upwards of a century and a-half extinct. The last wild wolf said to have been killed in this country was in Kerry as far back as 1710. Some other accounts place it at a later date. In Dr. Peter Lombard's book, published in 1632—seven years after the Primate's death,—at pp. 99, 100, mention is made of wolves, bears, rabbits, martins, hares, otter hounds, deer, and other animals, and the purposes for which they were utilised in this country. Our mastiffs or wolf dogs were employed for hunting down the wolves, as other special dogs are now used for hunting down other wild animals. H.

### HOUSE DRAINS IN RELATION TO HEALTH.\*

ANY system of domestic economy which omits the question of the purity of air of the dwelling, and more particularly of that species of impurity which is derived from excrementitious matters, must be pronounced seriously imperfect. Indifference, but more particularly the ignorance which begets it, with regard to this matter, brings sickness and sorrow into many homes, and leads to the sacrifice annually of many thousands of lives. It is a deep conviction of the importance of this subject to the comfort, health, and even existence of the domestic circle that has prompted me to contribute a few remarks upon it to the members of this Congress of Domestic Economy.

Every subject on the programme of this Congress is more or less intimately connected with the promotion and maintenance of health, and to none is it more important to pay attention than that of this paper. It is so difficult to excite attention to intangible objects like the atmosphere or the air of a drain, particularly when it is invisible and often not easily perceived by any of the senses. The present occasion, bringing together as it does so many intelligent thinkers and zealous workers in the field of sanitary science, appears to me a specially favourable opportunity for calling attention to this question, and so making it a starting point, a centre from which the subject may radiate and become one of those embraced by the physiological and sanitary teaching in schools and other educational institutions.

A house drain may be defined as a tubular channel, communicating at its one end, either directly or indirectly, with the waste and soil pipes of the house, and at the other end with the sewer; and, as these three portions really form one commonly unbroken system, it is necessary, in considering the question of house drains in relation to health, to include each portion of this triple arrangement.

The introduction of this subject is justified by the very marked effect drain air can and does exert on health, and the little regard that is paid to this fact by the majority of persons. Medical men, sanitarians, and a few others instructed in hygiene here and there, are all of our great population who ever give a thought to this question, or take a step in regard to it; yet there can be no doubt that that terrible disease typhoid fever,

diphtheria, and other zymoties are caused by, and propagated through the medium of, drain air. My own observations of the state of drains in this town prove to demonstration how drain air and certain forms of disease stand to each other in the relation of cause and effect, and in this respect my experience only confirms that of other observers. At the present day, indeed, probably few persons could be found to dispute this statement. The general question may be considered under three heads:—Absence or deficiency of drains. Defective drains. Properly constructed drains.

*Absence or Deficiency of Drains.*—A reference to the Report of the Inspections of the Medical Officers of the Local Government Board in 1875 shows that, in a considerable number of the 27 inspections made in towns, and some hospitals and asylums, in different parts of England and Wales, which were the seat of typhoid fever, diphtheria, general zymotic diseases, low type diseases, and a high rate of mortality—in some cases increasing year by year—drains were entirely absent.

The effects of sewer or drain air, or of the gases emanating from surface impurities of excrementitious origin on health, vary according to circumstances. Such air may be so diluted by good ventilation as to be perfectly harmless; often it possesses no disagreeable odour, and is found to cause no inconvenience to persons who spend a great part of their lives in sewers. At other times, where there is an absence of proper ventilation, the air of the same sewers will be found highly offensive, and will suddenly asphyxiate and kill. But the more usual condition of sewer or drain air is one between these two extremes, and inhalation of such ordinary non-infected sewer air for any length of time produces a variety of symptoms, from *malaise* and debility to disturbance of the digestive organs and low fever. It is believed also to aggravate many diseases which owe their origin to other causes, and to impress upon them a low type. When specifically infected by the poisons of typhoid, &c., it has the property of communicating these diseases.

The absence or deficiency of drains and sewers implies the collection of filth on the surface of the ground, or in cesspools, or in dumb wells, or all three. Persons living in houses so circumstanced have frequently been known to suffer from typhoid fever and similar diseases. It might be suggested that probably polluted well water acted as the true cause in these cases, knowing as we do how readily the disease is propagated through the agency of water, but this objection is disposed of by the fact that the introduction of proper drains and sewers has immediately been followed by a disappearance of the disease. The town of Calstock affords a good illustration of the view here stated. Before it was drained it was subject to constant visitations of typhoid, but after it had been drained, the visitations ceased. Where excrementitious matters are mixed with the soil, as in agricultural operations or in the earth-closet, they are rendered harmless, but where they are permitted to lie on the surface, more particularly in confined situations, they appear to impart to the surrounding atmosphere a quality resembling that of the dumb well, or a sewer, in which cases the absence of drains has the effect of inducing diseases similar to those caused by the breathing of drain or sewer air.

That sewer or drain air is capable of producing illness has been proved in a thousand instances. I well remember a case in my own practice some years ago, where a man, assisting in the opening of a choked drain, was suddenly attacked with vomiting, diarrhoea, cholera, and subsequent low fever; and it is easy to understand that the more gradual introduction of such gases into rooms, even if much diluted, will produce symptoms of a milder type. Hence the danger of—

*Defective Drains.*—Defects of drainage in towns are more numerous as would be expected than cases of non-drainage, the result being, however, much the same as regards

the effect on health. If any doubt existed on the matter, it would be set at rest by an occurrence in my own house some years ago. On returning home about six o'clock one evening I perceived the house to be full of what I have no doubt, from its odour, was sewer gas. A sink for washing glasses, &c., in the pantry proved to be the point of entrance, and the current of incoming air was so strong that it extinguished a candle held above the orifice of the drain pipe, which proved not to be trapped. There was no evidence that the sewer air coming in was infected, for it produced no specific disease, but, like common sewer-gas, it produced nausea and vomiting in several members of the household. The defects may be of various kinds; the drain may be unventilated, or insufficiently or inefficiently ventilated; it may not admit of flushing; or there may be imperfect trapping, or no traps at all, at sink and other openings near to or in the house; or there may be an accidental leakage through the soil pipe in the house. The serious effect of even very dilute sewer-gas and similar emanations on personal health would scarcely be credited except it had been witnessed. In illustration of this I will state to you another case as it occurred in my own house about three years ago.

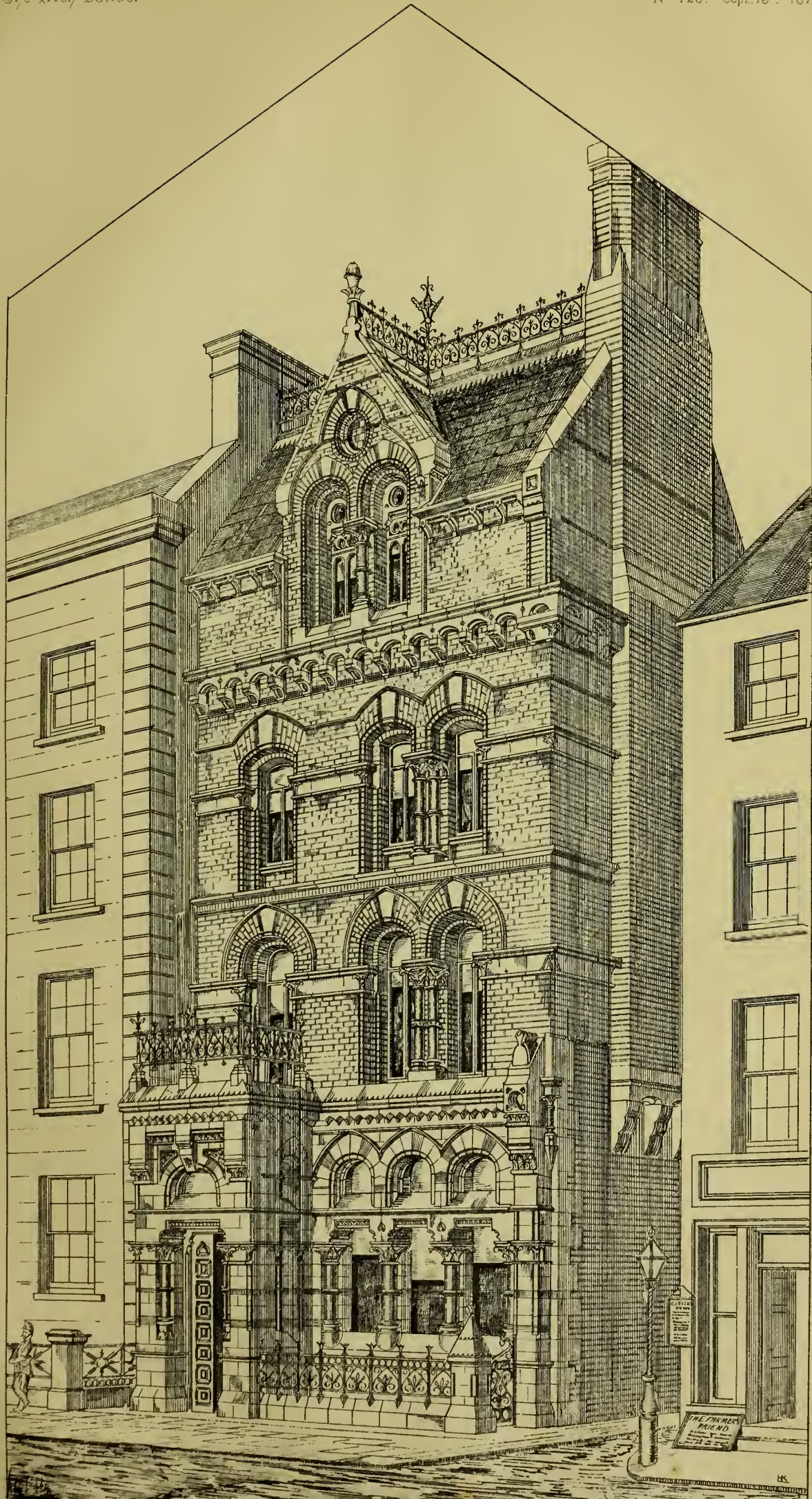
In order to save the housemaid the trouble of carrying the bedroom slops downstairs, I had set up in the bath-room a sink for their more ready disposal. The pipe from this sink, which was trapped, was only about 3 ft. long, passing through the wall and opening in the outer air freely into a larger descending pipe, which itself terminated above the ground over one end of an open channel which ran about 8 ft. or 9 ft. to a trapped drain. With these breaks of continuity, and other safeguards, no gas from the yard drain could possibly find its way into the bath-room; there was, however, a weak, but unsuspected, link in the chain, and it was this, the overflow pipe of the bath was made to communicate with the 3 ft. pipe from the slop sink, at about 2 ft. before its termination. In about ten days after the arrangement had been in operation, the person who slept in the room adjoining the bath-room was seized with a very mild yet persistent form of diarrhoea; the servants, also, near the bath-room followed next, and in a day or two every person in the house, except one, suffered in the same way. What seemed remarkable, but is very natural, is that the intestinal disturbance was always greatest in the morning, i.e., after every one had been exposed to the action of the gas all night in the shut-up house. The attacks being so general in their incidence, so persistent in their character, and intensifying with time, I felt sure that some common cause was operating, although I had no suspicion of its precise nature. I knew all the drains were carefully trapped, that no drain passed under the foundation, that there was no water-closet in the house, and no nuisance of any kind was perceptible.

It never occurred to my mind to suspect the short waste pipe which conveyed away the bedroom slops, till one morning, sitting thinking about the matter, I determined to go and examine it. There was nothing to be detected in the sink itself, but on placing my nose close to the overflow pipe in the end of the bath, which I have already said communicated with the sink pipe, I detected the faintest possible urinous odour. The whole matter was now intelligible; the very slight quantity of organic matter adhering to the sides of the sink waste pipe, after use for only about a fortnight, was undergoing gradual decomposition, the gaseous products of which were borne imperceptibly into the interior of the house, by a gentle current generated by the warmer temperature existing there. I immediately stopped the bath waste pipe with a cork, and, as if by magic, the diarrhoea ceased the same day.

If a minute quantity of gas, the result of the decomposition of what may be called healthy organic matter, enormously diluted with atmospheric air, can produce such re-

\* By Dr. Alfred Hill. Read at Domestic Economy Congress, Birmingham.





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Photo. taken by the Rev. Mr. G. J. W. at Waterford, Dublin



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sults as I have described, it is easy to understand what may be the effect of a larger quantity, less diluted, of a similar gas; and if we further reflect on the nature of the cholera and typhoid poisons, as far as we are acquainted with them, we shall have no difficulty in understanding one of the conditions of propagation of these and similar diseases, and realising the still more serious effects which may be produced by their inhalation.

In the discharge of my official duties, the fact of the connection between gaseous emanations and sickness is daily forcing itself on my attention. In most cases of zymotic disease into which I inquire, I find defects which may account for them. To give a few illustrations, I examine a respectable house where there has been a case of diphtheria; it is new, clean, well ventilated, supplied with good water, and is apparently everything that could be desired; but the kitchen sink is in direct communication with the sewer, and the sink being furnished with a moveable bell-trap, which, when in place, is of little use, but is often not in place, there is a frequent entrance of foul air, not only from the drain belonging to this particular house, but from the common sewer, the receptacle of all the drains in the neighbourhood, and of the specific poison of these drains, if they happen to contain any; and on emergency, one learns that frequently a disagreeable smell is perceived in the kitchen.

### THE SANITARY IMPROVEMENTS AT GLASGOW.\*

THE paper which Sir James Watson has just read before the British Association shows how much may be accomplished in improving the moral and physical condition of the lowest and most indigent inhabitants of large cities. The municipal authorities of Glasgow were one of the first to take advantage of the Artisans' Dwellings Act, and it is to be hoped that the thorough manner in which they have set to work to carry out the measures sanctioned by that Act will be followed by other great centres of population. The authorities of Glasgow had no ordinary difficulties to contend with, such indeed as are not to be met with in any other city of the kingdom. Scotch prejudices, inveterate superstition, and the crowded and repulsive state of the dens in which the lowest classes were living—if living it could be called, presented many obstacles to the improvement in the sanitary condition of the more crowded districts of this densely populated city. Not the most notorious rookeries in London can vie with the dirt, poverty, squalor, that until recently characterised certain parts of Glasgow. Sir James Watson states, that before any improvements were effected, the people of whom we are now speaking were huddled together in pent-up houses, and in "closes" three or four feet wide, leading to staircases of large tenements of three and four storeys, which rose on each side and ran backwards to the extent of 280 feet, into which neither light nor air could freely enter. In fact, a worse place for the propagation of infectious diseases could not be imagined, to say nothing of the physical and moral degradation of the great mass of people shut up within its pestiferous precincts. When any contagious disease broke out in these localities it spread with extraordinary rapidity and committed great ravages among the inhabitants, as if Nature would not, even if man did, countenance such a herding together of human beings as were to be found in the hovels and slums of Glasgow. Even as late as 1871, when some improvements had already been made, an epidemic sent up the death-rate to 70 per 1,000.

The way in which the Corporation of Glasgow set to work to overcome this great blot upon their great and thriving city deserves much praise. They had the town well surveyed. All the most obnoxious districts were condemned or marked out for improvement. Parliament was asked to sanction the expenditure of £1,250,000 in the purchase of property. The ratepayers were invited to assist the authorities in carrying out the proposed scheme, and they readily submitted to be taxed at the rate of sixpence in the pound on their rental for the first year and fourpence for the second year. From 1866 till the present time, the committee appointed by the City Council to carry out the provisions of the Local Improvement Act have been indefatigable in the discharge of their duties. Up till the end of May, £1,612,504 had been spent upon the

sanitary improvements. Forty thousand pounds are to be appropriated to the purchase of a public park; £65,000 to the paving of streets and the construction of sewers; and 18 acres of land have been purchased, to be laid out in new streets and open spaces.

Such are some of the great enterprises upon which the Corporation of Glasgow has recently embarked, and the actual results of which were strikingly revealed in the interesting details to which Sir John Watson drew the attention of his audience. As these facts speak for themselves, it is needless for us to point out the moral which they convey. But it should be observed that the interest attached to the above statement does not so much centre in the great need there is for sanitary improvements in all large towns, nor in the beneficial results of carrying them out, for all this is pretty well known, as in the vast reforms which may be accomplished in a city whose social destinies are presided over by a liberal, keen-sighted, and enterprising corporation, by municipal authorities which, instead of being trammelled by conventionalisms and old prejudices, move with the times and are ever ready, in the interests of the community over whose welfare they preside, to adopt any measures which science or experience may suggest. What, however, we would impress upon the attention of both municipal and sanitary authorities is the fact that their improvement of towns must not end with the mere pulling down of old rookeries and the erection of more commodious and healthy dwellings in their place, but in taking also some means to reform the dirty habits of the rising generation of their respective communities, so that the new and more salubrious tenements provided for them may not, through overcrowding, or through their own filthy and vicious habits, become almost as loathsome and as unhealthy as those which they formerly occupied. As we remarked more than twelve months ago, DIRT AND IMPROPERITY are the two great enemies which the sanitarian has to contend against. Dirt in all its various forms, dirt personal and dirt general, may go far to undo all the good that should result from the most rigid working out of the Artisans' Dwellings Act. Our own Public Health Society [London] is doing much good by disseminating, as we first suggested, among the working classes small tracts on various subjects connected with hygiene and the prevention of infectious diseases, and we would urge upon the Glasgow authorities the propriety of adopting a plan which is not only attended with little expense, but which could not fail to reach the homes, and influence the habits of the classes among whom the tracts were circulated. It would, in fact, enable the working classes to appreciate and to keep in a more decent condition than they have hitherto done, the tenements which have been provided for them, while experience would soon show them the comforts inseparable from a life of cleanliness and temperance.

### CLEOPATRA'S NEEDLE.\*

THE cartouche on this obelisk, among the original hieroglyphics, contains the name of Thothmes III. Sir Gardner Wilkinson gives his date as 1463 B.C. Mr. Samuel Sharpe, who advocates another system of Egyptian chronology, puts this Pharaoh about 1340 B.C. According to some writers, the obelisk, with its companion, stood originally at Thebes. Others again say Heliopolis. It was during the Roman period that this one and its companion were brought to Alexandria. Pliny states:—"There are two other obelisks at Alexandria, near the port, and close to the temple of Cæsar, which King Menephræ cut out of the quarry, each 42 cubits high." This name given by Pliny may be explained by stating that the Pharaoh of these obelisks is given in Manetho's list as Mesphra-Thothmosis. Abd El-Lateef, an Arabic author of the end of the 12th century, mentions that the two obelisks were standing in his time. The one now coming to England has long been prostrate, and covered over with sand. Both are much damaged, which is said to have been from the action of the sea air, for the both stood close to the shore. From this cause some of the hieroglyphics have become partially obliterated.

The measurement of the obelisk has been very variously given, but the following may be relied upon from its having been lately made by Mr. Dixon. Its original height was sixty-eight feet three inches, but one foot five inches of the pyramidion has been broken off, six feet three inches of it still remains. The shaft of the obelisk without the pyramidion is thus sixty feet seven inches. At the base it measures six feet eleven inches by six feet ten inches, thus showing a slight

difference in the sides. The defect of the broken pyramidion will no doubt be remedied by placing a bronze cap on the top, which will not be without authority from ancient Egyptian examples. The word obelisk is from a Greek word meaning spit or skewer, and hence the name of "needle." With the exception of the circumstances that this obelisk was brought to Alexandria during the time of the Romans, history records no other connection that it had with the name of Cleopatra. According to Dr. Birch, the ancient Egyptian word for obelisk, as it is given in the "Hieroglyphics," is "Tekhnui," or "Tekhn." The term "Men" is also used in relation to them, but this would seem to be only applying the generic word "monument," but it does not seem to be their distinctive appellation.

The exact idea under which such erections had their origin is not a settled point among Egyptologists. According to Pliny they were symbols of the solar rays. This would be in harmony with some recondite theories, but it is at variance with others. As they were placed in twos before the entrance to temples, they have been identified with Jachin and Boaz of Solomon's Temple, and according to some authorities, the two western towers, one on each side the entrance of our own cathedrals, are only developments of the primal obelical idea. To those wishing for some trustworthy idea why Egyptians set up such monoliths the following quotation may be of some value. It is from Mr. Bonomi, whose long stay on the banks of the Nile has made him a good authority on such matters. He says:—"As regards the original sites of obelisks, it should be mentioned that there are none found on the west bank of the Nile, as no pyramids are found on the eastern bank of the river in Egypt proper—the obelisk appearing to be a decoration of the cities of living, symbolised by the rising of the sun; as the pyramid is of those of the dead, symbolised by the setting of that luminary." Those words are mighty important as bearing on, as yet a little studied subject, the "Orientation" of temples.

The inscriptions on this class of monument seem generally to give the name and titles of the monarch, with declarations of his greatness and of the glory of his doings. The inscription on the Flaminian Obelisk in the Piazza del Popolo at Rome is of this kind. The one in the At-Maidan at Constantinople records the conquest of "Nabrina," or Mesopotamia, by Thothmes III., the Pharaoh of what we may now call "Our Obelisk."

The following is a list of all the known Egyptian obelisks existing to our own day. It is from a paper contributed by Mr. Bonomi to the "Transactions of the Royal Society of Literature," vol. i., with which is given a chart representing elevations of all the standing obelisks, whence their comparative size can be seen at a glance. There is one standing at Alexandria, one at Heliopolis, four at Karnak, one at Philæ—this is of sandstone, unscrubbed. There are as many as twelve at Rome, these were all brought over during the period of Roman domination in Egypt; there are two in Florence; one in Paris, one at Arles, in the south of France, two in the British Museum, one at Soughton-hall, and another at Alnwick Castle. To this list there have to be added the prostrate obelisk at Alexandria, now to be erected in London, and nine prostrate among the ruins of Saan, or Tanis; two at Karnak, but fragments of them only remain. If these are summed up we will have "in all twelve of the colossal order, of the period of the 18th and 22nd dynasties, and the total number of known Egyptian obelisks will be augmented to forty-two."

From the above list it will be seen that there are already in this country four obelisks, but it may be mentioned that they are very small ones. The two in the British Museum are entirely without the pyramidion, and are only about 8 ft. in length. The one at Alnwick Castle is more perfect, still it is only 9 ft. high.

Cleopatra's Needle bears upon it evidence that the foolish weakness which we suppose belongs to tourists and others of our own period, of cutting and scratching names on important structures, is no new form of vice. Rameses the Great, the Sesostris of the Greeks, cut his name upon this obelisk a century or so after it was erected, and later still another Pharaoh cut his cartouche and titles upon it. Job expresses the wish that his words were written, "that they were graven with an iron pen and lead in the rock for ever; any one wishing for an imperishable document, one not likely to be altered, would naturally think with Job, and that words cut in such material would be enduring. The monuments of Egypt, in granite, porphyry, and basalt, the hardest of stones, which are covered with writing in the hieroglyphic characters, have not been beyond the danger of changes by those who had some interest to serve. Many of the inscriptions have been tampered with. One of the most noted interpolations of this kind is that on the obelisk in front of St. John the Lateran at

\* From the Medical Press.

\* From the Daily News.



Rome. This monument belongs also to the reign of Thothmes III., and the forgery upon it—for that is the right name for the act—took place about the time ordinarily assigned to Moses. About that date the worship of what had been a favourite god seems to have been disestablished, and evidently great efforts had been made to obliterate the name of this deity from the memory of the people, and one of the means which seems to have been used was that of scooping out the hieroglyphics of his name from the granite, and inserting in their place those of Amun, whose worship had succeeded the other. These criminal erasures of this ancient document may be easily seen by anyone who will take the trouble to inspect it carefully, particularly in certain positions of the sun, when the hollows made by the operation are distinctly visible. There is a cast in the British Museum of the pyramidion of one of the fallen obelisks at Karnak, and another forgery is visible upon it; the hollow becomes apparent by placing a straight-edge along the surface

doubt but his extraordinary merit would speedily have placed him above every competitor but Mr. Garrick, and crowned him with the fullness of both fortune and fame." It was not to be, however; as Barry had ousted Sheridan, so Mossop in a short time was destined to oust Barry, the united for a season becoming fierce rivals, one determining to crush the other, but in the end eventually crushing and ruining themselves for the remainder of their lives. Theatrical jealousies differ little from personal animosities—indeed they are a compound, public and personal, in which the latter predominate over the former.

But let us not rush a-head. After the Crow-street managers secured Mossop, they concluded it advisable also to enlist the services of Foote for the ensuing season, for he had become a fashionable and popular actor at the time. Foote was engaged for a certain number of nights to perform his own pieces, and to bring forward on the boards his "Taste" and "Minor," which up to that time had never been played in Ireland. The Crow-street managers completed their engagements early in the autumn, and in the beginning of September Woodward returned to Dublin, satisfied, as well as his partner, that everything was settled to their satisfaction, and that a most promising campaign was before them. They secured indeed a powerful company, and perhaps the best formed of any hitherto witnessed, but this company was secured at a great expense, and no amount of patronage that could be expected at that time in Dublin was likely to recompense them for their heavy expenses, not to speak of allowing them a surplus of profits. Even had there been only one theatre at the time in Dublin, to cater for the amusement of the citizens, the patronage accorded would not be more than sufficient for its fair support.

Everything, however, was favourable for the Crow-street management: they had a new theatre, public favour, credit, and court influence. Barry and Woodward were also appointed by Robert Wood, the Master of the Revels in Ireland at the period, his deputies; and this act constituted the Crow-street house the Theatre Royal. In addition to these, Mr. Wood conferred upon the managers the office of directors of his Majesty's band, a post of honour if not of profit. The Duke of Dorset, too (always a patron of theatricals), when in Ireland was a great support to Crow-street, and on him the managers placed their chief dependence. The Duke and Duchess of Dorset showed their practical sympathy by attending Crow-street twice every week during the season. Nothing appeared externally to the eye to be wanting. Barry, remained in London behind Woodward to finish business matters and to await the convenience of Mossop, did not return until the end of October.

The theatre was in the meantime opened by Woodward on October 3rd, 1759, with a new occasional prologue "in the character of Rumour, written purposely to defeat the opposition formed against them." This prologue was spoken by Woodward with some effect. The opening play was "The Way of the World," and the cast was as follows:—Mirabel, Dexter; Fainall, Sowden; Witwood, Jefferson; Petulant, Whyte; Wartwell, Walker; Sir Wilford Witwood, Sparks; Marwood, Mrs. Kennedy; Mrs. Fainall, Mrs. Mynitt; Mincing, Mrs. Younger; Millimant, Mrs. Dancer (afterwards Mrs. Barry). A farce called the "Mock Doctor" followed, in which Sparks personated the doctor, and Mrs. Pye, Dorcas. The house was fairly full on the occasion, and both pieces were well received. It may be interesting to some of our readers to give a more complete list of the performers at Crow-street at this time, as it will afford a fair illustration of the amount of talent commanded by a representative Irish theatre nigh a hundred-and-twenty years ago. To those acquainted with theatrical annals it will be seen that the following list comprised a number of eminent Irish and English popular actors and actresses who had

reached distinction, and others who subsequently distinguished themselves both on the Irish and English stages. The gentlemen performers were—Barry, Woodward, Mossop, Foote, Dexter, Sowden, Hoaphy, Sparks, Vernon, Jefferson, Walker, Glover, R. Elrington, Whyte, Read, Mynett, Younger, Fisher, Fisher, jun., Knipe, Morris, Hayes, Corry, Oliver, Longfield, Messink, Aldridge, Mahon, Harvey, Stagoldoir, and Mr. Carmichael the prompter. The lady performers were—Mrs. Dancer, Mrs. Fitzhenry, Mrs. Kennedy, Mrs. Knipe, Mrs. Pye, Mrs. Younger, Mrs. Packenham, Mrs. Jefferson, Mrs. Chambers, Mrs. Walker, Mrs. Mynett, Miss Osborne, Miss Mason, Miss Roscoe, Miss Whyte, and Signora Coralina and her mother.

This was a goodly list of performers in itself to put upon the stage and pay, notwithstanding the low salaries performers at that time received, yet the payment to them alone amounted to upwards of £170 a week exclusive of tradesmen's bills, servants, &c., which often amounted to £200 more. Present-day or present-century salaries were never anticipated, and so modest were the hopes of even performers themselves that Hitchcock (himself an actor and a prompter at Crow-street in Daly's time), writing towards the close of the last century, remarks:—"They had not then, nor perhaps never will attain, in this kingdom a degree of opulence sufficient to justify such expenditure; the public cannot in reason expect it; and the manager who thus launches into such extravagance will too late feel the consequence of his imprudence." The managers of the Dublin theatres in 1760 certainly could not afford this outlay, nor could they for nearly forty years afterwards, though occasionally high salaries were paid in exceptional cases to actors and actresses of merit whose short engagements brought full houses that paid. Barry and Woodward, by all accounts, had a very successful season in point of attendance, but when all the expenses were summed up they found themselves in debt, and this deficiency went on increasing during the remainder of the management, until finally came a financial crash.

To the outside public Crow-street presented the picture of increasing success, and the citizens and play-going public were well pleased. The prospects of Brown and the Smock-alley company were discounted beforehand, and friends and foes appeared to be of the one opinion—that Mr. Brown had little or no chance of making headway against such odds as were against him. Novelty after novelty was presented at Crow-street. A Signor Lucca Fabiano, a dancer of some reputation, made his first appearance after the "Beggars Opera," but we are told "his abilities were of a moderate kind, and could not be put in competition with Mr. Aldridge, then beginning to be a great favourite, and who in one particular style of dancing was superior to any man in Europe." Of two young ladies, Miss Roscoe and Miss Osborne, who made their *début* about this time (1759) in Dublin, we learn that the former was the daughter of an actor of that name, and of some reputation. This young lady had a good figure and features, and her *forte* lay in lively comedy. She remained for several years on the Irish stage, but she finally retired, not being pleased with her position. Being a young lady of education, after quitting the stage she opened a boarding school at Bath for young ladies, which she conducted with success. Miss Osborne was a young English lady of respectable family, whom the death of her father obliged her mother to come with her only daughter to Dublin, where she is said to have lived with prudence and economy. "If fame," writes Hitchcock, "is to be credited, the same chance which gave the abilities of Mrs. Oldfield to the world, discovered those of Miss Osborne. A gentleman of much theatrical knowledge, by accident one day overheard her reading the play of "Venice Preserved" to her mother. Struck with the propriety and elegance of her manner, he a few days after mentioned this circumstance to Mr. Barry, who was his

## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

PREVIOUS to the opening of the winter season, the Smock-alley staff, who were to range themselves shortly under the leadership of Brown, spent the intervening time at Cork and Limorick, where it is said they played with tolerable success for several weeks. Two of the principal performers of the old company under Victor, Digges and Mrs. Ward returned for a time to Edinburgh. The re-organization of the Smock-alley company under Brown, although it was not very promising, yet it disturbed a little the day-dreams of the Crow-street managers, who were determined to snuff out their puny rivals by increasing the strength of their company for the approaching campaign. Barry and Woodward proceeded to London at the close of the season, having been preceded in their visit by Sowden, the desire of the managers being to secure every actor and actress of eminence their resources could command.

In the meantime the Crow-street company went on their usual summer tour, fulfilling engagements at Chester, Liverpool, and Manchester, and other towns round or near to the seaboard in the sister kingdom. Among this travelling company the principal performers were Mr. Isaac Sparks, Mr. Carmichael, Mr. and Mrs. Dancer, Mr. and Mrs. Jefferson, Mr. and Mrs. Kennedy, and others. Mr. King, who was a great favourite in this city, left for London, to the regret of his numerous admirers, and shortly made his first appearance at Drury-lane in October, 1759, in the character of Tom in the "Conscious Lovers." Barry and Woodward in recruiting appear to have met with considerable success in London, but Mossop was a danger in their way, for his reputation on leaving Dublin two years previously was equal to any actor on the Irish Stage at the time. Mossop stood well with the London audience, and the Crow-street managers, fearing a dangerous rival, would like to secure him, and made overtures to that end. Mossop at this time appeared to have not a very friendly disposition towards Garrick, and the latter, to use Hitchcock's words, "Great and unrivalled as the Roscius was, yet he was not superior to the stings of envy. The rising fame of Mr. Mossop appeared to have excited in him some such sensation, and it was whilst under this impression that the Crow-street managers addressed the former." Mossop yielded (as our already quoted author says) in an evil hour himself to the solicitation of the Crow-street managers, and they were only too ready to conclude terms to his satisfaction. Mossop made his own terms, in a word, and the parts of tragedy were to be divided between him and Barry.

"Thus," exclaims the author of the "View of the Irish Stage," "did a little pique urge him to a step he had ever after reason to repent, and plunge him into difficulties, distress, and poverty, which ended but with his life; whereas, had he remained at Drury-lane, there could not have been a

\* See ante.



particular friend, in so warm a manner, that Mr. Barry visited the young lady, and, from a few specimens which he prevailed upon her timidity to give, found his friend had not exaggerated in his report of her abilities. The result was that Miss Osborne's mother was prevailed on to allow her daughter to appear on the Dublin boards, where she continued for several years. Though her talents were not of a high order, she sustained many second parts in tragedy and comedy with success, while retaining an irreproachable character. Miss Osborne, in course of time, was married to Mr. W. Barry, the treasurer.

Early in the season, on the 13th of October, 1759, the Duke and Duchess of Dorset commanded a play, thereby giving public sanction to Crow-street. On this occasion the comedy of "The Stratagem" was performed, Mr. Woodward playing Scrub; Mr. Dexter, Archer; and Mrs. Dancer, Mrs. Sullen; a ballad farce followed, in which Mr. Vernon and Mrs. Chambers appeared. The house was a brilliant and crowded one. Barry arrived with Mossop towards the end of the month, and the appearance of the latter was announced for the 31st of October, in his favourite character of Zanga. The house was filled early, and reiterated plaudits told the feeling of the audience. Mossop's reception convinced him of the admiration in which he was held by his countrymen; but, apart from national feelings, Mossop was an ornament to the Irish Stage, and his acting to a degree perfect. As Zanga alone he outstripped every other actor of the time. Mossop's second was Richard, and his third Macbeth, in which Mrs. Fitzhenry made her first appearance that season. In a few days "Measure for Measure" was revived, brought forward, and capitally supported; Mossop as Duke; Woodward, Lucio; and Mrs. Fitzhenry, Isabella. Barry kept in the background until the novelty and excitement occasioned by Mossop's appearance somewhat subsided. It was not until the 17th of November that he came out with effect as Orestes in the "Distressed Mother," Pyrrhus, Sowden; Andromache, Mrs. Dancer; and Hermione, Mrs. Fitzhenry. This play was commanded by the Viceroy, the characters had new dresses, and no expense was spared to bring what occurred—a fashionable and good attendance.

Mr. Foote was brought forward early in December in the comedy of the "Old Bachelor," got up specially for his "Fondle Wife," after which followed his farce of the "Knights." On this occasion, owing to a number of capital objects, Foote's attraction was not great, but still his engagement, it appears, fully answered the manager's purpose, as Foote played upon shares and filled up the vacant nights. A few weeks subsequently Foote appeared in a number of pieces in succession—"Sir Paul Plyant," "Double Dealer," "Shylock," and in several of his farces. On the 11th of February following, Foote took his benefit and returned to England, not very well pleased with his visit on this occasion, in the matter of fame or profit. He had the mortification, it is said, to leave his pupil Wilkinson at Smock-alley in full possession of the town, rising each day in the line in which his master had excelled, a mimic acknowledged by many to be equal if not superior to his tutor. The immoral comedy of "The London Cuckolds," we are told, was performed about this time in Dublin, and drew several houses, but it would not have been possible a few years later.

An incident worth recording also occurred about this period—a period signalled by the success of some English victories by sea and land. Admiral Saunders accidentally put the ship he commanded into Cork, where he landed and proceeded to Dublin. On his arrival he found that the Lord Lieutenant, on whom he intended to call, was at the theatre with the duchess. The admiral hastened to Crow-street, where he was at once introduced to them. The audience was soon informed of the visitor, and evidenced its good feeling by loud huzzas. When the play was concluded the manager sent Mr. Vernon on to the stage, dressed in character,

attended by every vocal performer in the house, to sing "Rule Britannia." Crow-street Theatre resounding with acclamation was certainly a sight and a compliment entirely unexpected by the sea-beaten admiral.

### R A T T O O.

On Knock-an-aire's slopes I wander,  
Alone and thoughtful, 'midst the view  
Which surrounds me as I ponder  
O'er those scenes at old Rattoo!

At my feet the Casben's flowing,  
O'er my head the azure blue;  
From the west the sun is throwing  
Golden tints on old Rattoo!

Mystic Tower, tell thy story!  
Say what thou wert planned to do!  
Tell a craftsman of thy glory,  
When scholars dwelt at old Rattoo!

Whose pencil traced thy elevation!  
Who thy plan and sections drew!  
Of what race, or creed, or nation  
Came thy builders at Rattoo!

Tell to me what songs were sung then!  
Relate what jokes the masons knew!  
What style of plumb against thee hung then!  
Who was the "gaffer" at Rattoo!

Whisper me what's unrecorded!  
Softly speak, and tell me true,  
How poets rhymed, wit was worded,  
Long, long ago, in famed Rattoo!

Talk to me of the abbey yonder,  
Ere up its walls the ivy grew!  
Are scribes to-day of letters fonder  
Than those it sheltered at Rattoo!

Come, tell me of those spirits sleeping  
In the little graveyard at thy base!  
Are sages still and saints yet keeping  
Holy guard round the ancient place!

Address the men who, all God-fearing,  
Sought the church within thy shade;  
And there, with heart and soul revering,  
Worshipp'd the Lord, and preach'd and pray'd!

Puzzling pile of distant ages,  
Tell the hard what thou hast seen!  
Unsolved riddle of our sages,  
Was thy founder king or queen!

Give up thy secret, hoary Tower!  
Speak from history's hidden gloom!  
Art thou a whim of regal power,  
Or just to mark a hero's tomb!

Whatever notion gave thee being,  
Of one thing thou'rt a record true—  
A fact no craftsman can help seeing—  
There were cunning masons at Rattoo!

Whatever stories may surround thee,  
Or strange idea bound up in you,  
May peace and plenty smile around thee  
For ages still at old Rattoo!

DO CION FEIN.

Tralee, 12th September, 1877.

### MUNICIPAL DOINGS.

At a meeting of the Corporation held upon the 3rd instant, the annexed letter from Sir Arthur Guinness, Bart., M.P., addressed to the Town Clerk, was read *re* the resolution of the council anent

#### THE PROPOSED SCIENCE AND ART MUSEUM.

Ashford, Cong. Co. Galway,  
30th August, 1877.

DEAR SIR,—I regret the resolution come to by the Municipal Council of Dublin, which you forwarded to me on the subject of the bill dealing with the property of the Dublin Society, and I believe the council would have come to a different conclusion if it had had full information on this matter before it. The part of the resolution to which I am (as I believe in the interests of science and art in Ireland) obliged to disagree is the following sentence:—"We object to so much of the bill before us as invests the existing Department of Science and Art with any authority, privileges, or right of interference with science and art in Ireland." Though I am strongly in favour of a local board invested

with considerable powers, I could not approve of severing the connection of the proposed institution with the Department of Science and Art. My reasons will be found in the report of a commission in 1869, and the names of the members of which place their views above all suspicion. As it is probable that this question will arise next session in connection with the estimates, I have ventured to send a copy of the report of the commission to each member of the Municipal Council, which having been published several years since, may have escaped the memory of some. I have also sent four copies of the evidence taken by that commission to you for the use of members of the Corporation.

#### THE DEPUTY-SURVEYOR OF THE STREETS.

At the same meeting the report of the committee of "the whole house," submitting the terms of the appointment of the above officer, was read. After a long discussion and some opposition the report was adopted, the votes counting as 13 to 7. The "qualified man" will, we suppose, make his appearance anon.

#### MORE WATER WORDS.

At the meeting of Council on the 8th, the Town Clerk read the notice summoning the special meeting, which was stated to be

"For the purpose of making a special order under the provisions of the Act of the 10th and 11th Vic., cap. 34, to the following or the like effect: That application be made to Parliament during the next session on behalf of the Dublin Corporation, for an act to enable the Corporation to acquire by compulsory purchase a certain piece or plot of land at Stillorgan, for the purpose of constructing an additional reservoir for water thereon; to amend the Dublin Corporation Waterworks Act, 1874; and to amend, incorporate, or extend all acts, or parts of acts, necessary for carrying out the foregoing objects. Dated this 4th day of September, 1877."

The suggestion was adopted, and of course the necessary notice will appear in the newspapers in good time, and some folks will, no doubt, be satisfied.

#### THE CITY DRAINAGE.

The following resolution was brought up for consideration:—

"That in pursuance of the Rathmines and Pembroke Main Drainage Act, this committee recommend the Council to apply to the Local Government Board for a provisional order, or to promote a bill for the purpose of carrying the drainage of the city of Dublin into and through the main outfall sewer of the Rathmines and Pembroke Township Commissioners, or such modification thereof as may be desirable, and direct that the Town Clerk, the City Engineer, and the Law Agent do all things necessary for at once carrying the same into effect, and that the petition, the plans, and all other preparatory arrangements be forthwith provided by our officers, under the direction of Committee No. 1, which committee are hereby charged with the conduct of all same, reporting all such their proceedings to this council for approval, monthly, or oftener if expedient."

A discussion followed, and Mr. Dennehy proposed the annexed amendment, but before it could be put to a vote a number of members "cleared out," and there was "no house":—

"That inasmuch as the City Engineer has reported against the proposed scheme of carrying the drainage of the city of Dublin into and through the main outfall sewer of the Rathmines and Pembroke Township Commissioners, we decline to promote any bill in Parliament, or to incur any expense whatever with reference to such drainage scheme."

We have been wearily watching the doings of the Dublin Corporation for months back, but we fail to discern anything amounting to practical progression. Resolutions, speeches, amendments, reports, appointments, notices of motion, promotion of bills, wasteful expenditure of money, and sundry other things we have witnessed, but practical advancement none, or next to none. It is very amusing, no doubt, for the members of the council to be sitting for their pictures, but it is rather saddening to see the sorry figure our Corporation presents before the country and in comparison with some provincial bodies, who are doing important sanitary work, instead of talking of doing it.



### THE SOCIAL SCIENCE CONGRESS.

THE Congress this year will open at Aberdeen on the 19th inst., lasting until the 26th. On the evening of the first day the Earl of Aberdeen will deliver his inaugural address. On Thursday morning Lord Gifford will deliver his address on Jurisprudence. The meetings of departments will follow for the reading and discussion of papers; and in the evening the Lord Provost and the magistrates and town council will entertain a large party at dinner in the Town Hall. On Friday, the Right Hon. Lord Young will deliver his address on Education, the discussions will be continued, and in the evening there will be a *conversazione* in the Advocates' Hall and County Buildings, at which Lord Ronald Leveson Gower will deliver his address as President of the Art Section. On Saturday the Lord Advocate will deliver his address on Repression of Crime, after which the departments will sit, and in the afternoon there will be excursions to Dunnottar and Aboyne, and possibly other places. On Monday the proceedings will commence with the delivery of an address on Health, by Mr. Edwin Chadwick, C.B. In the afternoon, after the discussions, a visit will be paid to the Old Mill Reformatory, under the guidance of Mr. Sheriff Thomson; and in the evening there will be a working men's meeting. On Tuesday, Mr. James Caird, C.B., F.R.S., will deliver his address as President of the Economy Department; the sections will proceed with the discussions; and in the evening a *conversazione* will be given in the Music Hall. On Wednesday, the last day, a meeting of Council will precede the concluding meeting, at which the address of the President of the Council (Mr. G. W. Hastings) will be delivered, and a report on the business of the departments will be presented. In the afternoon, to wind up, excursions will be run to places of interest in the neighbourhood. It may be added that in addition to the business of the Jurisprudence and Education Departments, a number of special questions will be discussed in the Health, Economy, and Art Sections, embracing a wide range of topics of current interest.

### SOMETHING NOVEL IN CONCRETE BUILDING.

A BIRMINGHAM paper gives a description of an experiment in concrete building which is being tried by Mr. Edge, an architect. Much of the concrete hitherto employed for superstructures has been composed of broken brick, rubble, or stone fragments bound together by Portland cement. Where sufficient strength and durability have been obtained, the expense has been found a serious consideration. In the present case, however, the materials used are gravel and lime. Some time ago Mr. Edge acquired some building sites at Richmond-hill, and found that before he could proceed with the plans which he had formed, a large quantity of gravel must be removed. The existence of this large quantity of gravel led to the inquiry whether or not it might be utilised, and Mr. Edge entered upon a number of experiments in the direction of its employment in the making of concrete. The gravel consists of pebbles, red sand, and a certain quantity of marl, and it was found that if a lime concrete was to be made, the two latter constituents must be got rid of. The pebbles were accordingly washed, mixed with ground lime which is unslaked, and then water added. The lime has an affinity for the silica of the stones, but not for the sand and clay, and when the mixture described is allowed to rest for a few hours, it sets into a mass much more solid than brickwork, and nearly as hard as stone. Mr. Edge is now building a house containing three sitting-rooms and nine bedrooms, in which concrete plays a very important part. In order that the house may accord in style with those near it, it has a facing of red brick, but only to the thickness of 4½ in.

Inside this is a wall of concrete, giving a total thickness of about 15 in. The object in the case of the present building, is not so much that of cheapness as of increased substantiality, it having been found that 9 in. brick walls, in the case of several neighbouring houses, have been insufficient to keep out the damp. There is, however, no necessity for any employment of brick at all, as is shown by the construction of several interior walls of only 4½ in. in thickness; and, as will be further demonstrated in buildings yet to be erected, even in the construction of the flues the concrete is amply sufficient. The apparatus for building the structure is of Mr. Edge's invention, and while being extremely simple, serves its purpose admirably. He commences on the ground by putting in position two parallel rows of uprights, secured by iron rods. These uprights support boards, the space between which constitutes the mould, to be filled with concrete. A height of about 2 ft. 6 in. is poured in at a time, and when this has set, the boards are removed and hung higher up the uprights, and the work is continued. The uprights are long enough for three removes, and on the third being completed they are raised, and are supported by rods through the work. The highest wall in the building is about 50 ft., and the concrete having been carried up to that height without the interposition of either brick or stone, stands as dry, hard, and solid as could possibly be desired. It is estimated that a cubic yard of the concrete work, where the gravel is on the ground, will cost 11s. 9d., the amount being made up partly as follows:—Washing gravel, 2s.; two bags of lime, 4s. 6d.; labour, 3s. 6d.; as contrasted with 25s. to 28s. a yard for brickwork.

### THE STORAGE OF WATER, AND PREVENTION OF FLOODS.

THE report of the Select Committee of the House of Lords, appointed to inquire into the operations of existing statutes in regard to the formation of, and proceedings by, commissioners of sewers, conservancy and drainage boards, and to consider by what means such bodies may be constituted, their procedure improved and their powers enlarged, so as to provide more efficiently for the storage of water, the prevention of floods, and the discharge of other functions appertaining to such boards, has been issued within the last few days. It is a report of considerable importance on account of the interests involved. Almost all the witnesses are of opinion that, in order to secure uniformity and completeness of action in dealing with each river, each catchment area should, as a general rule, be placed under a single body of conservators, who should be responsible for maintaining the river from its source to its outfall in an efficient state; and in this view the committee entirely concur. With regard, however, to tributary streams, the committee consider the case of these might in some instances be entrusted to district committees acting under the general direction of the conservators, but near the point of junction with the principal stream they should be under the direct management of the conservators of the main channel, who should be a representative body, constituted of residents and owners of property within the whole area of the watershed. As to the principle of assessment for carrying out the works deemed necessary by the conservancy boards, the committee are strongly of opinion that towns and houses should contribute to the rate in question. At the same time there does not appear to be any injustice in rating uplands to the maintenance of a channel to which they contribute their quota of water, and the case is still stronger with respect to towns which are at present exempt from taxation for this purpose. There is also, as the committee think, no reasonable objection to the taxation of lands, &c., situated on tributary streams on account of their being taxed for the conservancy of such streams. Having

regard to those considerations, and looking to the extreme difficulty of rating lands according to the benefits derived, the committee think that the rates should be distributed over the whole area of a watershed, the lands and houses below the flood level being rated at a higher amount than those above it, and other graduations and exceptions being made to meet particular cases. Subject to the above recommendations, the committee think that the taxation required for drainage purposes should be levied on the basis of rateable value.

### KINGSTOWN SEWERAGE WORKS.

OWING to some statements and misstatements made before the Local Inquiry Commissioners, who sat lately in Kingstown, taking exception to the sewerage works now being carried out in connection with the internal drainage of that district, the town commissioners deemed it advisable to enlist the services of Mr. Charles P. Cotton, C.E., to thoroughly examine and report on the works already constructed. This report has been made with full details, and is before the public for some days. It is satisfactory to find that the works have borne the test of an examination, and have been declared efficiently carried out. The objections that were put forward recently in some of the morning papers in this city, should not have urged the commissioners to take action, for we know what a precious muddle our daily papers make when they touch upon architectural or engineering subjects. In fact the notices on these subjects in most of our daily political press are often little more than "penny-a-lining" reports, which too frequently draw forth letters from anonymous persons, disappointed in some way or another.

Mr. Cotton's report must be satisfying to the commissioners, as also to their engineer and town surveyor, Mr. Doyle. Doubtless Mr. Doyle was confident that his work was properly done, and was indifferent whether an examination took place or not; but it having taken place his confidence is strengthened. We are of opinion that a large sum of money has been expended on this inquiry which might have been saved; but persistent misstatements, again and again indulged in, often necessitate an inquiry at last to satisfy what is called the public mind, but which very often is only a flash of a local hole-and-corner opinion.

Mr. Cotton makes a few suggestions in his report to the effect that all man-holes, instead of being covered with Dalkey flags, should have iron covers, placed 12 inches below the surface of the road, with a ventilator about 9 inches in diameter coming up to the surface, and a suspended dish below to catch all road grit that may fall through. That at all steep streets, such as Northumberland-avenue, there should be a grit-trap chamber before joining the main sewer. He thinks the plan adopted of forming the inverts of the pipe-sewers man-holes of split pipes, instead of brick inverts, as very good. In conclusion, he states that the works of the internal drainage of Kingstown, executed since 1874, are, in his opinion, efficient, and that the remainder proposed and detailed will be equally efficient.

Concerning man-holes, ventilators, and the escape and disinfection of sewer-gas, we would make one or two remarks. The erection of large and high ventilating shafts in Kingstown is, of course, not needed or recommended, nor is it necessary considering the population and position of the town. In large and populous cities, with tidal rivers, the case is otherwise. In these places it often becomes necessary to erect ventilating shafts, or to use the up-cast chimneys of factories for extracting the sewer-gas. Sewers should be ventilated at stated distances along their main arteries, or at their highest and lowest levels. To disinfect the noxious effluvia or gases escaping from man-holes and entrances to sewers along our public streets, some practical scheme or



method is required. Charcoal filters are being utilised in places, but they often get saturated, and do their work in an imperfect manner. Mr. Baldwin Latham, some time ago in London, introduced charcoal trays, which were fixed at the summits of man-holes or shafts. When a sufficient number of these are employed and receive ordinary attention, they will be found to answer their purpose. The subject, however, of sewer ventilation must be considered in connection with house drains, and at present we must not be tempted to enter into details, though the Kingstown sewerage works affords us a peg to hinge a few remarks upon.

### DUBLIN ARTISANS' DWELLINGS.

WITHOUT giving in detail the report of the Dublin Artisans' Dwellings Company, we may usefully supply its place by a portion of the address of Sir Arthur Guinness, a director of the company, and chairman at the last half-yearly meeting. As the providing of healthy, commodious, and in every way suitable dwellings for the working classes in this city had our warmest advocacy for long years, we are disposed to give every honest attempt a fair trial. Some complaints having reached us concerning the sites of some of the dwellings now being built by the company, and the scanty accommodation afforded, though the rent is not fixed particularly low considering the accommodation, we think it well to give publicity at the same time to Sir Arthur Guinness's remarks. He is reported thus:—

"I believe myself far more in improvement in the habits of the working classes by giving them suitable dwellings—which I am sorry to say they have not in Dublin—than any legislation, however stringent. We have built, or contracted for, 186 tenements, at an average cost of about £116 10s. the tenement, and on the three sites—that is, Buckingham-street, Echlin-street, and Dominick-street—we have spent a total of £23,317. I am aware that in companies similar to ours one of the great difficulties has been the keeping down of the extras. It is a most difficult thing to do, but I know that our board have done all in their power to do so. At present the extras stand at about 9½ per cent. It may appear high, but owing to some defective foundations, concrete bad to be used and other precautions taken for the stability of the buildings, and I hope in future we may be able to reduce this very much. I should have given the particulars, perhaps, of the amount spent on these sites. On the Buckingham-street site there have been built or contracted for houses to the amount of £10,127. The number of tenements in Buckingham-street is 75. In Echlin-street there has been spent £3,242 for 32 tenements. In Dominick-street 23 cottages have been built for £2,699, and 56 additional tenements in Dominick-street for £7,248. This gives an average of the cost of the buildings of £116 10s. We have for some time declined to entertain offers of any other sites, as the Corporation authorities have under the Artisans' Dwellings Act obtained a provisional order for the purchase of several sites in the city, and we look forward to obtaining some of those sites from the Corporation. Although the members of the Corporation who are charged with this duty have evinced the warmest interest and kindest co-operation with the board in the matter, we do not exactly know in what position the obtaining of this land is at present; but we feel sure no time will be lost unnecessarily by the Corporation in obtaining this ground. It is the more desirable to do so as we are waiting to obtain this land for the purpose of building upon it. The two sites which we think most desirable are the Coombe site, which has already been mentioned, and the Boyne-street site. If we obtain these and build houses upon them, in round numbers the estimate cost of these houses would be—on the Coombe site, 195 tenements at a cost of £23,400; on the Boyne-street site, 114 tenements at an estimated cost of £12,780. We will be very glad to have the opinion of the shareholders on this. We deem the sites very eligible, and think we could build houses which would be suitable to the necessities of the districts; but we would be very glad to hear the opinion of the shareholders here, as we may possibly come into possession of the ground by next meeting."

We are not concerned, as some shareholders may be, on the head of dividends; we are more concerned in seeing healthy and com-

fortable dwellings erected, and not miserably contracted in the size of their rooms.

The Artisans' Dwellings Company is not a philanthropic enterprise, but a commercial one, and it is started very properly to turn out a paying concern and not a losing one. Philanthropy must be kept apart from the commercial principle. If public benefactors wish to spend their money in providing homes for the working classes, and building and maintaining them at a loss, and out of pure sympathy, there is a wide field for their labours. Artisans' Dwellings Companies are not composed of men of that class; they want a good or fair return for their money, and holding as they do such common place and worldly opinions, we must look upon them with a commercial eye. It is dangerous in these times to be mixing up philanthropy with the commercial principle.

The sites of some of the Dublin Artisans' Company's dwellings and proposed dwellings, are not good ones, but, of course, their foundations may be improved. For instance, Buckingham-street Lower, or the locality of Aldborough Barracks, is low ground, and made-up ground to boot. With concrete foundations, good drainage and good building materials, healthy houses can be built in this locality in the present day. To the question whether the Artisans' Dwellings Company of Dublin are at present building satisfactory houses for the working classes of this city—whether the accommodation is sufficient and the rents moderate, we will be prepared to say, perhaps shortly.

### TECHNICAL EDUCATION.

ALTHOUGH coach-building is somewhat removed from house-building, yet in the interests of our craftsmen, whom we desire to stimulate and to see technically educated, we make room for the following report of the distribution of prizes given by the Coach-makers' Company, London, one of the modern representatives of the old London Trade Guilds.

On Saturday, the 1st inst., Mr. E. Greenwood, the master of the Coach and Harness Makers, distributed the prizes offered by the company. This year for the first time have been offered, in furtherance of their wish to forward the work of technical education, certain prizes to apprentices and others under the age of twenty-two years, as it was found if the prizes were left open that the same men got them year after year. This arrangement has brought forward a number of young men, some of them mere lads, who would have had no chance against older and more skilled draughtsmen.

After the prizes had been distributed, the master addressed a few words to the winners, and especially to the younger portion, and expressed his hope that they would appear before the court at a future period as winners of the first prizes. Mr. W. Heywood, of Huntingdon, returned thanks on behalf of those present.

The following was the prize list:—

For freehand and mechanical drawing.—First prize (no limit as to age) the company's silver medal and £3, with certificate, to Mr. W. H. Hamlin Hamshaw, 38 West-street, Leicester, aged 23, coachbuilder's assistant, who won a certificate of merit for an essay contributed by him last year; 2nd prize (for apprentices and others under 22 years of age) the company's bronze medal and £2, with certificate, to E. Atterbury, of Huntingdon, aged 14, an apprentice to coach smithing; also certificate of merit for drawings, to Mr. W. Farr, 51 Castle-street, Salisbury, coach trimmer (winner of the second prize last year); Mr. W. Simpson, 38 Moore-street, Chelsea, coach painter; Mr. F. W. Headford, 34 Alpha-terrace, Canterbury-road, Kilburn, trimmer; Mr. J. Sorrell, 8 Artillery-terrace, Victoria-street, Westminster, body maker; Mr. W. Darley, 3 Medway-street, Horseferry-road, Westminster, coach curver; Mr. W. Heywood, Vine Cottage, High-street, Huntingdon, foreman (the winner of a certificate for his essay in 1875); Mr. T. Coward, 52 Bellefield-road, Brixton, coachsmith; L. J. Butler, 167 Seymour-place, Bryanstone-square, coach body maker's apprentice (winner of the first prize for drawings to scale in 1876, and of the

second prize in 1875, and a certificate of merit in 1874); A. Greenway, 35 George-street, Worcester, aged 18, clerk; V. Breakwell, Cleobury Mortimer, Bewdley, Worcester, aged 16, apprentice; J. E. Breakwell, Cleobury Mortimer, Bewdley, Worcester, aged 15; C. Western, 5 Keen's-yard, St. Paul's-road, Canonbury, aged 21, body maker.

For drawings of carriages, or parts of carriages, to the scale of one inch to the foot.—1st prize (no limit as to age) the company's silver medal and £3, with the company's certificate, to Mr. W. T. Casson (the winner of the second prize awarded in 1875 for carriage building, and also a winner of one of the certificates awarded for essays on technology on carriage building, and also the winner of the second prize offered for essays on carriage building in 1876), 49 Coburg-buildings, Westminster, carriage maker; 2nd prize (for apprentices and others under 22 years of age) the company's silver medal and £2, with the company's certificate, to Mr. C. Bolt, 8 Georgina-street, Camden Town, aged 18, coach body maker's apprentice, and a winner of certificates in 1874 and 1875; 3rd prize (for apprentices and others under 22 years of age) the company's bronze medal and £1, with the company's certificates, to Mr. F. C. Pendry, 1A Howick-place, Victoria-street, Westminster, aged 16, coach body maker's apprentice; to Mr. S. Mallard, 18 Dorset-road, South Lambeth, coach body maker; to Mr. H. Lucas, 43 Ossington-street, Bayswater, coachsmith.

The company's prizes for technology in carriage building, for 1877, have been awarded as follows:—1st prize to Mr. M. Mullins, 42 Maylor-street, Cork (winner of the 2nd prize in 1876); 2nd prize to Mr. W. H. H. Hamshaw, 38 West-street, Leicester (winner of the 1st prize in 1877 for freehand or mechanical drawing, and winner of a certificate of merit for an essay in 1876); the 3rd prize was not awarded. The 1st prize was the company's silver medal and £3, and certificate; and the 2nd prize a bronze medal and £2, and certificate.

For essays on carriage axles, carriage springs, carriage ironwork, the first prize was awarded to Mr. G. F. Budd, Blackstock-road, Finsbury Park, coach body maker (the winner for three consecutive years of the 1st prize for drawings to scale—winner of a certificate of merit for his report on the exhibition of carriages in 1873 at South Kensington, winner of a certificate of merit for his essay, 1875, and winner of the 1st prize for essays in 1876); 2nd prize to Mr. W. Heywood, Vine Cottage, High-street, Huntingdon, foreman (the winner of a certificate for his essay in 1875, and the winner of a certificate for freehand or mechanical drawing this year); 3rd prize to Mr. J. C. King, 104 Park-street, Camden Town, foreman.

The competition was very satisfactory, and it has tended to draw attention to a very important branch of carriage building by men who are evidently actively engaged in it, either as foremen or workmen.

The standing committee reported that the company are doing good work by thus drawing out and making known skill and industry by helping the workmen to help themselves, developing higher skill and intelligence, enabling those with industry and perseverance to reap the advantages open to those who prove themselves capable.

It may be seen from the above list of prizes that Mr. M. Mullins, of 42 Maylor-street, Cork, has again distinguished himself by carrying off the first prize for technology in carriage-building, having been awarded the second prize in 1876. We believe Mr. Mullins is a pupil of the Cork School of Art, and is the winner of several prizes.

What are the young coach makers of Dublin and Belfast thinking about? Or, what is more to the point, perhaps—considering our particular advocacy,—what are our building craftsmen in Dublin dreaming about these years past? There is a College of Science in St. Stephen's-green, a good School of Art at the Royal Dublin Society House, Kildare-street, and a Mechanics' Institute in Lower Abbey-street. Neither house-building craftsmen nor coach-building craftsmen can have any valid excuse. Ample facilities exist for learning to draw, and master the principles of their trades. If workmen do not advance, they must retrograde, for there is no standing still. If our native workmen do not bestir themselves, they will find in the course of a few years foreign workmen will take their place. A good elementary education, supplemented by technical knowledge, is indispensable now for workmen making a successful headway



through life. Experience in itself is good, but scientific education and experience is better, for it means skilled labour of the highest order.

#### KINGSTOWN—NEW WORKS.

PLANS, specifications, &c., of the No. 1 intercepting and outfall sewer (usually called the west pier project, and built under the pier seaward over 1,000 yards), as prepared by Mr. F. A. Doyle, C.E., Town Surveyor, have been fully approved of by the Board of Works, the custodians of the harbour and adjuncts. This is a most important and interesting work, conceived with great boldness and originality; and which, if properly taken advantage of by the Blackrock Commissioners, and jointly used to free the foreshore from nuisance and contamination, will confer an incalculable amount of benefit on both townships, and add to their salubrity and health. The expenditure is estimated at something near £15,000, and it will be money well expended. It cannot but be gratifying to the Town Commissioners that their officer is perfectly competent, able, and experienced not alone to design the heaviest and most elaborate works of their kind in the kingdom, but to carry them out to their final and most satisfactory completion, as tested by the highest in the profession. It is intended to proceed with this work without delay.

#### "THE SCIENCE OF TEMPERANCE."

On Thursday evening Dr. B. W. Richardson, of London, lectured on the above subject at the Antient Concert Rooms. After some remarks anent the late Dr. Cheyne, of this city, the lecturer continued—He would mention facts to them simply as a man of science. He had no social, no political topic to bring forward; but in the course of his career he had had the opportunity of making certain physiological inquiries, which had touched on the action of the class of bodies to which alcohol belonged on the human body. He could take up certain facts which science now taught, and leave them to reflect on them. He would begin with the simple statement to be left on the mind—That those who were inclined to favour the temperance cause, and to teach others what was the meaning of strong drink, should teach, as a primary fact, that the substance we now call alcohol, and which had been so called for three centuries, was not a fluid, as most people supposed, standing alone in the world as something which was to be taken as food. He had no doubt the ancients looked on it in this light; but the advance of modern chemistry had told them that wine was simply water containing that which they now called ethylic alcohol, and he would first impress on their minds that this was not a substance standing alone as if apart from the rest of the chemical substances. Since 1834 they had learned there were a number of substances, all known by the name of alcohol, and only different from each other in the fact that the elements were found in each in different proportions. All these belonged to one family. He had made experiments with a certain number of the alcohol family, and found they all acted alike, but that the period of their action and its intensity varied with their weight. The second point was that alcohol was not specially sent us as a gift to be a food. No one of these alcohols came to us more than the other. They spoke to us of grapes and vineyards, and said, "What would be done with them if they were not turned into wine?" They might use the same argument in reference to the potato spirit, or anything else which would produce alcohol by fermentation. Fermentation was purely an artistic process, discovered and carried on by man, producing that ethylic alcohol which they found in their strong drink. The third point he would like to impress was that when as physiologists or biologists they looked at the construction of the animal kingdom, and how it was made

up of solid and fluid, and how every living organization was composed largely of fluid, or about 79 per cent., except in some animals where there was a large quantity of hard matter, as bone and shell—they were struck with the fact that there was no provision made for such an agent as alcohol. Nature produced organizations simply on one fluid—water—and it was evident we should take no other fluid into the organization for dissolving the solid matter, or making us ready for work. The fourth point he would impress was, that ethylic alcohol acted on the bodies of all men and animals in the same manner as the other chemical substances. It did not act as food, but produced effects differing from what was natural, just in proportion to the dose taken. Ethylic alcohol entered the bodies of most warm and cold-blooded animals, readily producing effects in very regular proportions. He found the fatal dose was a proportion of sixty minims, or a drachm, of fluid to the pound weight of the warm-blooded animal. Fatality might be averted by scientific men, but that amount was the dose that produced the effect on all animals not accustomed to it. For instance, in a man weighing 120lb., fifteen ounces would produce this effect. . . . There was a body of men and women to whom alcohol had become such a necessity that they took it regularly as if it were a food simply to produce the first stage, of which he had spoken, in which the body seemed to be warmed, and the heart raised to do its work. These people were called usually moderate drinkers, and some were constituted that they readily eliminated the alcohol. But there were exceptional instances even with those who never went beyond the first stage; and even to those moderate drinkers material injury was done by the small quantity they took. It might be said that, notwithstanding all these objections to the use of alcohol, notwithstanding all the phenomena which was produced by it, and the dangers that resulted from it, yet it was of some use to human economy. In was brought forward as an argument that it warmed the body. People said they took it to warm the body; and "take a drop to keep the cold out" was one of the commonest offers of hospitality. It had been assumed, therefore, that alcohol, by warming, did good; that it was burnt within the body in the same way as other food that sustained the warmth of the body, such as starch, fat, and oils. If this was a fact he would readily admit that it did some good, though he would be inclined to argue that there were other substances that would have the same result. There had, however, been two series of marked observations bearing on this point, which plainly demonstrated that alcohol was not consumed in the body. It was a fact that the presence of alcohol in the blood interfered with the combination of oxygen in the blood, and that which interfered with oxydation necessarily interfered with combustion. But that was a refined point he need not enter on, because there were other things that showed that whatever became of alcohol in the body it was not burnt as other substances were.

#### BREACH OF AGREEMENT BY BRICKMAKERS.

ATHY PETTY SESSIONS.

Mr. James Hayden, Churchtown, summoned Patrick Byrne, Michael Byrne, and Mary Rowan, for breach of agreement under the Employers and Workmen Act.

Mr. Patrick Hayden, son of complainant, produced and proved to the agreement entered into by defendants, by which they bound themselves to work from the 1st of April to September. The defendants left their work without notice or permission on the 27th August.

Neither of the Byrnes appeared. They were decreed in the sum of £10 as damages.

Mary Rowan's defence was that she had two sick children.

Sir A. C. Weldon, to Mr. Hayden—Did this

woman put it forward as an excuse that she had children sick?

Mr. Hayden—No, your worships. On the contrary, I saw her at the corner when I was hiring other women, and asked her to come to work; she said she would not until she was able to make as much at brick-making as she would at the harvest—3s. per day.

The Chairman—If even you had children sick, you should have provided a substitute. If such a state of things as this is allowed to go on there would very soon be an end put to these manufactures. If you do not like brick-making do not enter into agreements. You are decreed for £6, and you, and all like you, had better understand that your property will be seized and sold under those decrees until the full amount is recovered.

#### THE DE VESCI MEMORIAL FOUNTAIN, ABBEYLEIX.

The committee entrusted with the carrying out of the above memorial has selected a design by Mr. Rawson Carroll, architect, of this city. The work will be executed by Mr. A. P. Sharp, of Great Brunswick-street. The cost will be about £330.

#### CORPORATION ECONOMY.

FIVE years ago the Alliance and Consumers' Gas Company, being in a state bordering on insolvency, an attempt was made by a majority of the Dublin Corporation (many of whom were large shareholders in the company, to saddle the ratepayers of Dublin with the burden of their bankrupt property, and a bill was introduced into Parliament to enable the Corporation to purchase the gas works. The determined opposition of the ratepayers defeated the plot, and the bill was thrown out by the committee of the House of Commons, in May, 1873. A similar opposition compelled the Corporation to abandon a second bill having the same object, in April, 1874.

Messrs. Cleminshaw, gas engineers, were employed by the Corporation to report on the advantages that would be gained by the ratepayers in making the purchase of the gas works, and to assist in getting the Act of Parliament passed, to enable them to carry out the project. The unanimous decision of the judges of the Court of Queen's Bench, given in 1875, ultimately informed the members of the Corporation interested in it, that the fees due to Messrs. Cleminshaw for their services (£513) could not legally be paid out of the Corporation funds. Well aware that in honour and honesty this little bill ought be paid, and unwilling to pay it out of their private pockets, the Corporation, a short time ago, conceived the idea that the Gas Company were in duty bound to pay this sum, on the grounds that their present prosperity was in a great measure due to the information given by Messrs. Cleminshaw, and a resolution to this effect was passed by the Corporation and forwarded to the Gas Company. At the meeting of the Corporation on the 3rd inst., a letter was read from the secretary of the Gas Company, in reply to that communication; it contained a promise that the matter would be brought before the shareholders at their next meeting, but repudiated the supposition that the present prosperity of the Company was in any way due to the information given by Messrs. Cleminshaw.

The report of Mr. Fowles, gas engineer, on the condition of the Dublin Gas Works in April, 1874, would not encourage the most sanguine reader to dream of the present seeming prosperity of that establishment, nor would the suggestion in that report, "that the pressure on the gas might be raised throughout the district to ten-tenths" (1 in.) lead anyone to imagine that Mr. Fowles ever dreamt of a pressure ranging from 2 to 3 in. being ever used. Hence it may easily be supposed that Messrs. Cleminshaw, not being unprincipled tinkers, did not suggest how the wet meter in use could be made to indicate a fictitious transit of gas (50 per cent. in excess of what really passed through them) by the adoption of excessive pressure.

Those wet meters are supposed to be tested and proved to indicate correctly the bulk of gas passed through the measuring drum wheel each time it revolves, the pressure on the gas passing through the meter during the process of testing being about five-tenths. They cannot indicate the actual bulk of gas passed through them when the pressure on the gas is from four to six times greater. They must indicate an excessive fictitious bulk, because



the measuring drum wheel obtains an unjust impetus from the excessive pressure, causing it and the index wheels put in motion by it, to rotate and indicate the passage of a bulk of gas that could find no outlet even if it passed through the drum wheel, for it could not be consumed at the burners during the time of its indicated transit. The indications of fictitious bulks of gas, and the losses caused by such indications, would be materially lessened if gas consumers would insist on being supplied with dry meters.

Many of the ratepayers may have forgotten that the Corporation involved them in upwards of £400 expenses when making a sham opposition to the passing of the Gas Act of 1874, which Act materially helped the Gas Company to better their position at the cost of the consumers. The Gas Company were then ordered by the Committee of the House of Commons to pay the Corporation £500 for the expenses of the opposition. That sum remains unpaid (the Corporation not having demanded it), although the ratepayers have had to pay the expenses. Perhaps the £500 will now be utilised to pay the demands of Messrs. Cleminshaw. J. K.

### "MODEL LODGINGS."

A "WORKING MAN" writes to our contemporary the *Builder* thus:—

Allow me to call your attention to the "Improved Industrial Dwellings Company's" premises as now erected. I have three rooms and a scullery, for which I pay 8s. 6d. per week; one of the bedrooms is so small that I cannot get an ordinary bedstead into it, and the other bedroom in some parts you can stand and touch the opposite walls, it is so small. The scullery is so small that two persons cannot pass each other; and my wife, when washing, must put the fire out and put her washing apparatus where the fender ought to be, otherwise the door cannot be opened. The waste water from the sink flushes the water closet through a pipe which has neither trap nor bend, the consequence is that when the lid is on the water-closet the place is filled by a horrid stench. There is but one cupboard in the place; not a door or window fits (doors were put up by piece-work, twelve a day per man.) Isolation there is none; a noise four flats off can be heard distinctly when all the doors are shut. During the greater part of the year there is not a single light in the whole place when night comes, and people have to find their way up five stories in the darkness at the risk of breaking their necks, the stone steps being nosed with plain cast-iron. In some of the flats of three rooms there are thirteen persons crowded. Yet these places were built for the better class of working people, and pay a good dividend.

### HOME AND FOREIGN NOTES.

The new Town Hall, Manchester, was formally opened on last Thursday, with civic pomp and ceremony. A banquet took place in the evening.

**THE RIGHTS OF TRAMCARS.**—At the close of a case which came recently before the Sheffield magistrates, in which the Tramways Company were the complainants, Mr. Rodgers, one of the magistrates, remarked that many of the drivers of the cars drove as if they thought the whole world ought to make room for them, but the real fact was that they must make room for all the world. The 57th section of the act enacted that notwithstanding anything there might be in the Tramways Act, the company should not acquire any right other than that of using the road. Therefore, if they had no right bey and the use of the road, their right stood like the right of all the rest of the public to the use of the road, and they had no priority. By the 62nd section of the act it was also provided that nothing in the company's act, or in any bye-law, should abridge the rights of the public. He did not at all admit that the slow traffic was to cross the road to allow the cars to pass when the other side was full of business, as the practice was a dangerous one, though it might be adopted when convenient. The rights of the public had first to be considered, not the rights of the company. The town council could pass bye-laws, but no bye-laws could abridge the rights of the public, and when it did that it was void.

**GAS METERS.**—An important question brought under the notice of the Standard Weights and Measures Department is, says the Warden of the Standards in his report for the past year, just issued, the question of testing the index of a gas meter. At present the inspector of gas meters is not required

by law to examine into the accuracy of the index, and consequently gas meters are stamped as correct although the inspector's examination is a partial one. Three recent instances have been reported to the Standards Department in which consumers of gas were charged for gas much in excess of what they had consumed, owing, as it was subsequently accidentally discovered, to the inaccuracy of the index only. In one instance a "3-light" meter registered five times more than was really consumed; in a second instance a "300-light" meter registered three times more than was really consumed; and in a third instance a gentleman of Torquay complained that his meter, though stamped as correct, had been found to register 86,000 in excess. The whole system of testing gas meters seems to be conducted in rather a "happy-go-lucky" fashion; for it is mentioned in the report that on the officers of the Standards Department examining the condition of the working standard gas measures used by the inspectors of London, Edinburgh, and Dublin, in the actual testing of gas meters, it was found that in no case had these working standards been reverified since their original verification in 1860. The condition of the working standards issued to other places is probably similar. After a period of 17 years the errors of these working instruments may now be considerable, and the accuracy of any results obtained from them is doubtful.—*Pall Mall Gazette*.

The report of the Belfast Gas Committee will be read with interest by all the municipal authorities in the kingdom. Like a great many other towns in the United Kingdom, Belfast had long complained of the quality of the gas supplied to it by the company having the benefit of a monopoly; and it was thought, also, that the charge for it was higher than it need have been, though at 3s. 11d. per thousand feet the inhabitants of this busy manufacturing town were paying less than is paid at the present moment, perhaps, in a majority of boroughs. In spite of a great deal of opposition, and many predictions of failure and mishap, the Town Council of Belfast determined to buy the existing gas works, and carry them on for the benefit of the ratepayers. This was an experiment which, as everybody knows, has been suggested in many places, but there are few in which it has been actually carried out, and the facts and figures laid before the Belfast Town Council last Saturday have therefore a peculiar interest. In the first place, the complaints of bad gas seem to have entirely disappeared. The light has been materially improved in quality, and satisfaction with it is said to be general. There is no very great alteration in price, but an advantage of 2d. per 1,000 feet has been secured, and the council anticipate further reductions in price, and improvement in quality. Moreover, a net profit on the year's working has been made to the extent of £11,460, and a reduction of 50 per cent. in meter-hire is announced. All this well calculated to encourage the extension of the experiment to other towns afflicted with bad light and exorbitant charges, and it seems very probable that the proper system of supplying our streets and houses with gas will have been attained by the time the universal adoption of the electric light has been rendered practicable.—*Globe*.

### TO CORRESPONDENTS.

**CITIZEN.**—We shall notice the matter fully on an early occasion. The subject will keep.

**AN ARCHITECT (London).**—To hand. Thanks.

**REVIEWS.**—Notice of one or two volumes which we have been obliged to hold over for some time, shall appear in our next issue.

**INQUIRER.**—Mr. Denis Murphy, of Macroom, is the builder of the new chapel in connection with the Convent of Mercy, Bantry, of which we gave an illustration in our issue of 15th ult.

**CONCRETE.**—The price of our yearly volume is 9s. bound. Send post order or stamps, and say how to be sent.

**J. C.**—It is evidently a gross infringement of the act relating to newspapers.

**RECEIVED.**—W. C. (too late).—R. F.—Finbar.—M. D. (Belfast).—J. H.—G. K.—Artisan.—A Chip.—N. P.—A. R.—&c.

### NOTICE.

We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.

Correspondents should send their names and addresses, not necessarily for publication.

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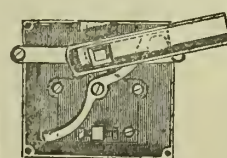
In pursuance of this object, many interesting documents—public and private, ecclesiastical and secular—never before brought to view, are presented. Also sketches are given of some of the characteristic churches, together with photographs of a few of the men of note, and transcripts of inscriptions upon ancient monuments and church plate.

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

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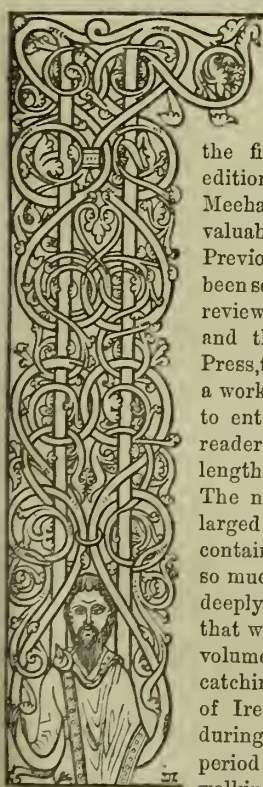
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## THE IRISH BUILDER.

VOL. XIX.—No. 427.

## IRISH FRANCISCAN LITERATURE AND ART.\*



Our number for August 1st we made a few brief remarks concerning the issue of

the fifth and enlarged edition of the Rev. C. P. Meehan's more than ever valuable historical work. Previous editions have been so well criticised and reviewed by the British and the Irish-American Press, that it would now be a work of supererogation to entail upon the Irish reader particularly any lengthened criticism. The new and much enlarged edition, however, contains in its appendices so much fresh matter of deeply historical interest, that we will dip into the volume for the purpose of catching some glimpses of Ireland in the past, during a very stirring period that Rinuccini was walking this land. The

work under notice, as a whole, is rather outside the advocacy of the subjects dealt with in a professional journal such as ours; but though it is ecclesiastical, it is historical, and, being historical, it deals with many matters interesting to the general reader and the student of Irish history.

Here is an extract from Appendix D, of a literary and archaeological character:—

"Notwithstanding Father Mooney's statement of the destruction of the precious books, some of the most valuable of the literary monuments belonging to the library of Donegal have come down to us.

\* "The Rise and Fall of the Irish Franciscan Monasteries, and Memoirs of the Irish Hierarchy in the Seventeenth Century. With Appendices, &c. By C. P. Meehan, C.C. Fifth Edition." Dublin and London: Duffy and Son.

The Book of Hymns (Liber Hymnorum) and part of the Psalter in the autograph of St. Camin of Iniscaltra, who flourished in the seventh century, and now in the archives of St. Francis' Merchants'-quay, Dublin, after more than two centuries' sojourn in Louvain and S. Isidoro, Rome. The Book of Hymns with its glosses is said to be over a thousand years old; and the Psalm (118th), 'Beati immaculati in via,' all that remains of St. Camin's calligraphy, excited the admiration of the erudite Ussher, who describes it thus:—'Habeatur Psalterium, cujus unicum tantum, quaternionem mihi videre contigit, obelis et asteriscus diligentissime distinctum collatione cum veritate Hebraica in superiore parte cujusque paginae posita, et brevibus scholiis ad exteriorem marginem adjectis. Atque illud S. Camini manu fuisse descriptum communi traditione ferebatur.' A splendid testimony to the exquisite penmanship and philological attainments of an Irish saint, who, more than eleven centuries ago, in the little island of Iniscaltra, on Lough Derg, was able to collate the Vulgate with the Hebrew text, and enrich his work with a lucid interpretation of obscure words and passages. The celebrated Colgan, who examined the fragment, writes:—'Among the books belonging to the Convent of Donegal are preserved some ancient commentaries on the 118th Psalm, which tradition says were written by the hand of St. Camin.' The Dublin archives contain also the ten folios long missing from the Book of Leinster (compiled by Mac Gorman, Bishop of Kildare, 1160), which is now in Trinity College Library, but formerly belonged to the Donegal Convent. Among the other Gaedhelic MSS. in the same depository, of which our metropolis may be justly proud, will be found the Martyrology of Cathal Mac Guire, and that of Donegal, together with the autograph of the first part of the Annals of the Four Masters, brought down to A.D. 1169, with all the approbations, introductory matter, and autograph notes of Father John Colgan."

Although Mr. Gilbert and others have recently, and O'Curry previously, furnished us an account of Irish MS. materials, *fac similes* of which have been recently produced, yet Mr. Meehan's notes will render our information more complete.

The following notes from Appendix G contain a good deal of compressed information, with indications where the reader may find fuller details:—"The tomb erected by James Nugent still exists in the church [Multifernan], and bears the following inscription:—'*Sumptibus Jacobi Nugent, F. Richardi Nugent de Donouer, qui obit, 18th Feb., A.D. 1615.*'" There is a monument to a descendant of William Delamar, the original founder. There can be little doubt that the venerable edifice was considerably restored in 1644-5, when Richard Nugent, Lord Delvin, sat in the upper, and Piers Nugent in the lower house of the Catholic Confederates of Kilkenny. The Nugents of Donore have always proved generous friends to the Franciscans of Multifernan, nor should we forget that the Rev. Mr. Conway, who was guardian in 1828, took great pains to preserve the monastery. The annals entitled "*de Monte Fernando*" were not written in Multifernan, as is clearly proved by Dr. Aquila Smith in his learned *Introduction ad Annal. de M.F.*, published in the *Archæological Tracts* relating to Ireland. Sir Henry Piers, in his "Description of Westmeath," states that the rebellion of 1641 was planned within the walls of Multifernan, and that the convent was at that period a flourishing establishment. Little reliance, however, should be placed on the baronet's assertion, for, although we were to accept his statements, we should remember that Multifernan was visited in 1642 by Tichbourne, governor of Drogheda, who after burning, as he informs us, "all the corn and houses in the neighbourhood," was not likely to spare the monastery, had it been then restored to anything like its ancient beauty. We may also add that Jones, the Parliament General,

made a raid on the place about the beginning of 1648, when he was stoutly encountered by the Franciscan fathers, who, aided by the peasantry and some soldiers, beat him off. In the admirable memoir of Gabriel Beranger, contributed by Sir William Wilde to the "Journal" of the Kilkenny Archæological Society, we find that the distinguished French artist [and Irish naturalised one] visited Multifernan in August, 1779, accompanied by Bigari, whose picture of the ruined edifice is engraved in Grose's *Antiq.*, vol. 1, plate 121. The abode of the Franciscans was then "a small thatched convent." "The reverend fathers came out," says Beranger, "and invited us to refresh ourselves; went in; drank some bottles of good claret with them; found them learned gentlemen, well versed in antiquities."

The above note, and what it points to, would make an admirable subject or subjects for a paper at one of our archæological association meetings. While annually the members of English archæological societies are exhausting the history of every nook and corner in England, inclusive of castles, abbeys, dolmens, monoliths, caves, and kistvaens, numberless unworked fields of Irish archæology are lying fallow. Traditions, once plentiful, are dying out; national monuments are passing away, and the history of our country is but half written, and that half but half performed. Mr. Meehan's book, however, in many ways, and particularly in the invaluable notes in the appendices, contains most valuable and suggestive materials to the hand of the future historian, ecclesiastical, and even civil.

In Appendix I, there is the following note in addition to what is detailed in the narrative of Father Mooney (written about 1616), given in the first portion of Mr. Meehan's book:—"The Convent of Moyne is still the burial place of the O'Dowds. Sir Richard Musgrave, in his notice of James O'Dowd, who was executed at Killala, states 'that they (the O'Dowds) have a burying place in Moyne, where may be seen the gigantic bones of some of them who have been very remarkable for their great stature, as some of them exceeded 7 ft. in height.'"

In the third volume of the *Anthologia Hibernica*, 1794, there is a short account of Moyne Abbey, with an engraving by Samuel Clayton, then a youth in his seventeenth or eighteenth year, father to Benjamin Clayton, the engraver of several of the illustrations in the early volumes of the old *Dublin Penny Journal*. The drawing in the *Anthologia* was made in 1792, and the description of the building will afford an idea of the ruins of the above Abbey as it existed at the above date. The writer says:—

"The Abbey itself is almost perfect, except the roof and some buildings on the north side, which were taken down about forty or fifty years ago by the proprietor, to furnish materials for a dwelling-house, which was erected nearly on the site of the old walls, and joined the great church. The sacrilegious hand that done this, I was told by the country people, never came to any good after, nor any of those who had been concerned in it. Certain it is, the house was but a short time inhabited, and is now completely in ruin. One might suppose that Time, while with an unrelenting hand he committed so many ravages on the house that was so sacrilegiously reared, had in pity spared the remains of the adjoining edifice, that once, with its peaceful and inoffensive inhabitants, had been devoted to the offices of religion and piety."

Doubtless if the article from which we take the above had met the eyes of Mr. Meehan, he would have noticed it. In the 37th of



Elizabeth, a grant was made to Edmund Barrett, of the monastery, and all its appurtenances, to hold the same for ever, at the annual rent of 5s. At that time it consisted of an orchard and four acres of pasture, surrounded by a stone wall. When Father Mooney visited Moyne in 1606, he found the abbey in possession of an English widow, who let the church and a few cells to six of the friars. The whole neighbourhood there was thickly planted with English and Scotch settlers, and we believe Welshmen also, for the Barony of Tyrawley had a number of Welsh settlers; and, if we are not mistaken, the Barretts were of Welsh extraction.

In 1794 the remarkable square tower, according to the writer in the *Anthologia*, was then in a good state of preservation. It was ascended by a spiral or winding stairs of 101 steps. "On one side," remarks the same writer, "there is a confessional of hewn stone for two priests to sit in, with a hole in each side for the persons who are at confessions to speak through. The cloisters are still entire, and of exquisite workmanship; most of the beautiful ramified stonework of the windows is still preserved, the inside of the abbey has been long used as a burial place, and the chancel, with all the niches round the church, are filled with bones and skulls, the only entrance is through a low arched door in the south side." The ruins of Moyne Abbey oven now are beautiful in their greater ruin. From Mooney's narrative and other accounts, we learn that the monastery of Moyne, like Donegal and other houses, once possessed a valuable library, and the place for a century and a-half was the *provincial* school to which all aspirants to the habit of the Franciscan Order were wont to frequent. We trust that what still remains of Moyne Abbey will be preserved from future possible vandalism, and that it will, with other beautiful and excellent specimens of our ancient architecture, be included in the catalogue of our National Monuments docketed for Governmental care and preservation.

Before passing from the subject of Moyne Abbey, it will not be amiss to mention a geological and architectural fact connected with Moyne Abbey. Oolitic limestone is rare in Ireland, but it occurs along the shores of Killala Bay in the vicinity of Moyne Abbey, and it has been used in the construction of that building, where the sharpness of the sculpturing is still retained, notwithstanding the long time that has elapsed since the beautiful and ruined abbey was erected. It is generally believed that oolitic limestone, derived from Normandy and England, was not uncommonly used in structures in Ireland in the 11th and 12th centuries, but from what we have stated and what is known at present it may be seen we have native oolite, and that indigenous materials have been used with effect in Ireland several centuries ago.

In Appendix K, Mr. Meehan supplies the following among other notes anent the Convent of Kilconnell:—

"In 1678, the Castle of Bunowen, and adjoining lands, once the domain of the O'Flaherties, were granted to the Geoghegans, of Castletown, County Meath, in lieu of their estates, forfeited by the Crown. The Geoghegans changed their name and religion; and the last possessor of Bunowen levelled the castle, and in his turn was made landless by the Landed Estates Court. The ancient line of the O'Flaherties is well represented by Martin F. O'Flaherty, Esq., of Lidecan, a worthy and dear friend of the present writer. We are indebted to Mr. Dermot Fox of Kilconnell for some interesting facts in connexion with the more recent history of

the convent, which merit record here. In 1865, in consequence of the growing dilapidation of the place, a public subscription was set on foot, with a view to arrest further decay. This appeal having met with a liberal response from Protestants and Catholics, sufficient funds came to hand to enable the committee to replace all the mullions missing from the windows, and also to restore some portions of the fine tracery, which had been greatly injured by time. Many of the principal objects of interest in the convent, and amongst others an arch missing from a cloister, have been thus preserved. The work having been carried out under the superintendence of a competent architect, there are good grounds for hoping that this timely, and by no means inconsiderable outlay of money, has secured one of the most beautiful of our national monuments against further decay for many years. It is a pleasure to add, that the initiatory movement which led to such a gratifying result is due to an English clergyman, the Rev. E. Muriel, who, in virtue of his office of Rector of Kilconnell, was then the legal guardian of its ancient convent. Having already mentioned the hook presented by Egan to Kilconnell, we take this opportunity to state that Marsh's Library preserves the autograph copy of the Latin and Irish Vocabulary compiled by Richard Plunket, of the Franciscan Convent, Trium, in 1662. The calligraphy of this small MS. volume is very beautiful."

The author, it is further stated, is lamented in some Latin verses, which are given, written by Patrick Dardis, a member of the same religious house.

Appendix M contains the annexed interesting note:—

"In 1611, Valentine Blake Fitz-Thomas, then mayor [Galway], built a mortuary chapel for himself and his posterity on the south side of the choir; and in 1642, Richard Martin, of Dungorie, bequeathed a considerable sum for the erection of a chapel in the same monastery of Galway. In 1643, Father Valentine Brown, then guardian, caused the ancient church to be re-opened and mass sung for the first time since the suppression. The same guardian, whose name figures in Kinneucini's despatches, repaired the founder's tomb, and spared no pains to restore the sacred edifice, from which the friars were ultimately ejected in 1652, when Cromwell's soldiers, under Governor Stubbers, destroyed the church and its rich monuments. Stephen Lynch, Francis Birmingham, and Francis Burke were members of the Franciscan community of Galway, and distinguished themselves by their learned works published at Rome, where they died about 1690."

The appendices both to the "Irish Franciscan Monasteries," and to the "Memoirs of the Irish Hierarchy," are brimful of notes and facts of a deeply historical character, and to even the mere antiquary and archaeologist they offer an enticing field to cull and study. The "Book of Accounts," now published for the first time, is indeed of infinite value to the native historian and topographer, even though the time it covers is short. The original is in the Public Record Office, London. These accounts, as far as they extend, are the public accounts of the Supreme Council of the Confederate Catholics, and with certain of their receivers and agents. These accounts deal with matters, revenue, military and legal expenses—in fact "ways and means" in general of the Confederate Government. Many names in the lists crop up after their long sleep who lived stirring lives in their day, and whose representatives are still amongst us. The name of Patrick Archer, a noted merchant at Kilkenny, at the time of the Confederates, figures conspicuously as an agent in these transactions. Patrick Archer, we may add here, was one of the members of the city of Kilkenny in the Confederate Catholic Parliament of 1646, and he was one of those restored to his property by the Act of Settlement.

Among the list of names of persons paid annuities and pensions by the Government of Ireland in 1672, we find the name of this Kilkenny merchant entered thus:—"Patrick Archer, £200, till he be paid £5,883 19s. 6d.

and £410 5s. 6d., being granted to him by letters patent dated March 13, 1662, and his Majesty's letters, May 2, 1662."

Some historical account of the ups and downs, the outings and innings, of other persons who figured in the Irish pension list, and who ended their lives more peaceful than they began them, and many of them by a complete "wheel about," would without doubt be most suggestive and interesting. The subject, however, is not within the province of this journal, except in an incidental way.

We must drop our pen here until opportunity offers again for another dip into the Rev. C. P. Meehan's fruitful volume, for it is full of sunshine and shadow, and throughout it we catch many glimpses of literature and art of Ireland in the past.

## NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

### SEVENTH PART.

BEFORE the year 1780 no general work in illustration of the public buildings of Dublin, with descriptive matter, appeared in this country. True, as we have already stated, George Faulkner projected a "Vitruvius Hibernica," which was not proceeded with; and it is matter of great regret that the excellent idea was not carried out. Occasional "views" of public and private princely mansions of note in Dublin and the provinces were drawn and engraved by Irish artists about the middle and throughout the latter half of the eighteenth century; but these prints are now scarce. Joseph Tudor, a painter, received several premiums from the Dublin Society for his landscapes; and one of his contemporaries (as quoted by Mr. Gilbert) writes of him that it was owing to Tudor "this metropolis can boast of the glorious produce of artists, excelling any other of its extent, not only adorning itself, but illustrious in other cities more populous and heretofore more remarkable for studies of this nature." A series of views of Dublin were painted by Tudor, which were well engraved, and were published with inscriptions in French and English. Samuel Madden's premium of £5 for the best drawings performed by any boy or girl under fifteen years of age was paid in 1746 to Miss Jenny Tudor for drawings executed the year before. Her drawings in black and white, after Raphael and Titian, were adjudged the best submitted. A number of Tudor's views were engraved by John Brooks, of Cork-hill—an excellent but unfortunate artist, whose end was rather miserable in London, to which he removed several years before his death, and where he executed several works, and some of a not commendable character.

Among other views of Dublin before 1780 were those of the Irish Parliament House, by Rowland Omer, engraved by Messrs. Mazell and Halpin; and a view of Lord Charlemont's Casino at Marino, Clontarf, drawn by Thomas Ivory, the architect of the Blue Coat Hospital and other public buildings in Dublin. The latter view was engraved by E. Rooker. Both Ivory and Omer's names appear in the list of competitors who sent in designs in 1769 for the Royal Exchange, Cork-hill (now City Hall). Among the names of artists and engravers who were employed in the illustration of "Walpole's British Traveller," published in 1784, there are some Irish artists. Brooks, the engraver, who was established on Cork-hill some years before the close of the first half of the eighteenth century, was the teacher of a number of engravers of note, including Spooner, Purcell, Houston, and James M'Ardel—the latter one of the best, if not the very best, mezzo-tint engraver of his day. Some of the few plates of birds illustrated in Rutt's "Natural History of Dublin" were engraved by Charles Spooner above named.



In 1780 appeared the first general work of its kind—"Views of the most remarkable Public Buildings, Monuments, and other Edifices in the City of Dublin, delineated by Robert Pool and John Cash." This work gives a series of views, with brief historical descriptions of each building, and it was issued under the patronage of the Dublin Society. The work was, "Dublin: Printed for J. Williams, No. 21 Skinners'-row. 1780." It contains a good list of subscribers' names, among whom are several of the noted public men of the day. The work contains an introductory historical sketch of the City of Dublin, ancient and modern, and the typography and paper are good, and, on the whole, the publication is creditable to the printing and publishing trade of this city. The printer, James Williams, executed other works, and some years afterwards was established at 20 Dame-street, as bookseller and stockbroker; and in the latter capacity, if we are not astray, the representatives of the bookseller of Skinners'-row continued for many years in Dame-street in the stock-broking business.

Prior to the last-named volume appeared an architectural work of note, by George Semple, a Dublin architect, entitled, "A Treatise on Building in Water." This work contains sixty-three copperplates, but they contain no engraver's name. The work contains two parts—the first giving a succinct account of the repairs and re-building of Essex Bridge, of which Semple was the architect; and the second part deals generally with the subject of building bridges, and all other kinds of work whose foundations require to be laid in deep salt or fresh water, bogs, morasses, and other situations. We may have occasion to speak more in detail of this book hereafter, and its author. Semple's work was published at his own cost, and in its title page the place of its publication is thus stated:—"Dublin: Printed for the Author by J. A. Husband, (No. 28) Abbey-street. MDCCCLXXVI." The volume in size is 4to, and the paper and printing are fairly good.

William Paulett Carey, afterwards known as a journalist of some note and a United Irishman, published between 1780-90 a number of political prints. Carey was both a portrait painter and an engraver, and among his prints was one, published in 1877, representing the famous Father O'Leary, and the Presbyterian Dr. Campbell joining hands on the altar of peace. In 1791, Carey commenced the publication of a journal of sixteen columns in large folio, entitled, "*The Rights of Irishmen; or the National Evening Star.*" The front page was surmounted by a print representing a Protestant, Catholic, and a Presbyterian shaking hands, with the inscription—"In hoc signo vinces," indicating, of course, a uniting of Irishmen—as much to be desired now as in Carey's day, irrespective of creed or party. Carey's paper and surroundings are so fairly given by Mr. Gilbert, we shall quote his description in preference to anything we might say on the subject:—

"The principles of *The National Evening Star* were those adopted on the foundation of the Society of United Irishmen later in the year of its publication. This paper, written almost entirely by Carey, soon gained popularity from its tone, and its editor was styled the 'printer of the people'; his essays most attractive to the public taste were those signed 'Junius Hibernicus'; and his poetic contributions under the name of 'Scriblerius Murtough O'Pindar' were subsequently printed, and entitled 'the Nettle, an Irish bouquet, to tickle the nose of an English Viceroy'; being a collection of political songs and parodies, dedicated to the Marquis Grimaldo [Buckingham], Governor of Barataria, by Scriblerius Murtough O'Pindar, now handing about in the first circles of fashion, and sung to some of the most favourite airs. To which are added, the Prophecy, an irregular ode, addressed to his Excellency shortly after his arrival; and the Triumph of Freedom, addressed to the Right Hon. Henry Grattan, by the same author.' Carey became notorious by the decided opinions he promulgated relative to the various points then being agitated; and he devoted a considerable space in his paper to the advocacy of Tandy, while the latter was under prosecution.

Considering it his duty to censure Dr. Theobald MacKenna for differing with the Catholic Committee, he assailed him in a series of letters published under the name 'William Tell.' MacKenna, in retaliation, succeeded in having Carey rejected when proposed a member of the United Irish Society by Rowan and Tandy; however, on a second ballot he was elected by a large majority. In 1792, Carey was prosecuted for having published certain political documents issued by the United Irishmen, for which the Society promised him indemnification, but finding himself deserted by them when in difficulties, he, in self-defence, gave evidence on the trial of Dr. Drennan in 1794, and appealed to the public in justification of his conduct. Carey engraved several of the plates, and wrote the majority of the verse in *The Sentimental and Masonic Magazine*, published from 1792 to 1794, and subsequently emigrated to America, where he died. His sons were long the most considerable booksellers in Philadelphia, where they published in 1819 M. Carey's elaborate *Vindictæ Hibernicæ*, a compendium of which was given to the public under the title of a 'Mémoir on Ireland, Native and Saxon,' by the late Daniel O'Connell."

Samuel Price, an eminent bookseller, was established in Dame-street in 1764, and before he retired from business he lived for some years at 55 Henry-street. He died at Ball's Bridge in May, 1793. Bernard Murray, of Chronicle-court, Dame-street, was established as early as 1778. At "Virgil's Head," in the same street, lived for several years Samuel Watson. The shop was opposite Shaw's-court, and by him was issued for long years the well-known Watson's "Gentleman's and Citizen's Almanack." In after years Watson and his representatives lived at 71 Grafton-street. Watson did a lucrative business for several years towards the close of the last century. He issued several diaries and memorandum books. One of these dedicated to her Grace the Duchess of Rutland, and styled the "Rutland Memorandum Book," is noticeable from the advertisement announcing it about 1786. It is described as "elegantly printed from copperplates, and ornamented with an engraving of her Grace the Duchess of Rutland, with her coat of arms, &c. This elegant pocket-book, though so small as to go under a frank to any part of Ireland, contains engagements for every day in the year; blank paper for memorandum; a kalender, with tables for the rising and setting of the sun and moon, the tides, interest, exchanges, table of guineas from 1 to 1,000; rates of carriages, post tours, rates and distances from Dublin, with a variety of other useful tables and lists. Bound in silk, cases beautifully gilt over, with pocket pencil, asses skin, &c. To these who wish to oblige their friends, no present can be given at this season of the year so useful, elegant, and acceptable, as the 'Rutland Memorandum Book.'" This was not a bad advertisement of Samuel Watson. His "Compleat Memorandum Book" was "humbly inscribed to her Grace the Duchess of Leinster." His "Queen's Kalender," 1786, which, for cheapness and elegance, not to be exceeded, he announces as "printed on the finest writing paper, and embellished with an engraving of her present Majesty Queen Charlotte . . . gilt over in a most elegant manner, inlaid with four beautiful engravings of Earl of Charlemont, Hibernia, General Washington, Liberty, &c." In 1786, the "Gentleman's and Citizen's Almanack" was, "Dublin: Printed for Samuel Watson, Bookseller, at 71 in Grafton-street, and Thomas Stewart, Bookseller, No. 1 King's Inns-quay." Coming some years further we find the Almanack compiled by "John Watson Stewart," and "printed by Thomas Stewart and John Watson Stewart, Booksellers and Stationers," at the same address on King's Inns-quay. Whether the successor of Samuel Watson was his nephew or not, or his son-in-law who incorporated his name with his own, we are unable to say, but the Stewarts continued to publish the Almanack for several years into the present century; and, if we remember aright, the firm was for some years known as "Stewart and Hopo" or *vice versa*. Samuel Watson, we might have added, published for a short time

a periodical entitled "The Young Gentleman's and Young Lady's Magazine, or the Repository of all Entertaining, Useful, and Polite Knowledge." There was also towards the close of the last century a William Watson a bookseller of note at 7 Capel-street, afterwards William Watson and Son, booksellers and stationers, but whether of the same family as the above we are unable to say.

A society formed in Dublin in 1792 for "the purpose of Discouraging Vice and Promoting the practice of Virtue and Religion," held their weekly meetings at the house of Watson in Capel-street. In 1793 this association had 150 members, comprising many public, professional, literary, and ecclesiastical men of note at the time. William Watson, senior, was the secretary, and William Watson, junior, the treasurer. The questions discussed at the weekly meetings consisted of such matters as "The religious education of the rising generation by parents, schoolmasters, and others; the best means of promoting a regular and conscientious attendance on public worship and the holy communion, and due observance of the Lord's day; how most effectually to recommend and restore the practice of family prayer; how to restrain profane swearing, cursing, and to guard against the horrid crime of perjury; what may be the best means of promoting honesty and industry, and discouraging idleness in the lower classes, and of preventing and discountenancing intemperance, dissipation, and ruinous extravagance in the upper classes of the community, and, in a word, whatever may contribute to the temporal as well as the eternal welfare of mankind." This was a wide field for the association, and they succeeded, we believe, for a time to effect some good. One of the public prints of the time furnishes the following account of some of the labours of the association:—

"Last Monday [the first Monday in November, 1793] exhibited a spectacle in this city highly pleasing to every friend of virtue and humanity. A procession formed of all the several parochial charity schools in the metropolis, conducted by their schoolmasters and mistresses, to and from St. Werburgh's Church, where an examination of the progress made by each in the principles of the Christian religion was held by the Rev. George Miller, A.M., F.T.C.D., before the Association for Discountenancing Vice and promoting the Practice of Virtue and Religion; when silver medals, with emblematic devices, bibles, &c., were given as premiums. The association, we understand, intend to hold such examinations annually in future, and also publishing the names of the successful children, as well as those of the respective masters, as the best means to excite emulation in both."

On the occasion referred to several of the members of the association joined in the public procession, walking two by two before the children, and nearly five hundred children are stated to have attended at St. Werburgh's.

Alexander Stewart, a printer and publisher of some journals and works, lived for some years in Dame-street. He kept a circulating library, and in 1774 he published "St. Patrick's Anti-Stamp Chronicle, or Independent Magazine of News, Politics, and Literary Entertainment." Later we find Alexander Stewart established in the printing business at 86 Bride-street, where he printed Wenman Seward's "Topographia Hibernica" in 1797. The volume is 4to, and is dedicated to the then Duke of Leinster. Seward's volume may be described as a topographical dictionary on a less ambitious scale than Lewis's that followed in the present century. The typography and the topography of the volume are not above criticism, but far worse executed works were turned out from the Irish Press at the time. The volume before us has a number of illustrations inserted, which were struck off from plates previously used and executed for the *Anthologia Hibernica* of 1793 and 1794. Seward, some years previous to the publication of the above volume, issued a somewhat similar volume, but on a less extended scale, entitled the "Hibernian Gazetteer." In announcing



his new volume, Seward says in his preface:—

"The following work, however (except in the mere form of alphabetical arrangement), is materially different from the former, as it contains a description of several hundred additional places, and has been enlarged and improved throughout with the utmost care and attention. We think it unnecessary to point out the obvious utility of such an undertaking; we submit the merit of our design and the execution of it to the judgment of an indulgent and impartial public."

Seward was the author of another work entitled "Collectanea Politica," published in 1801, in three volumes. There are reasons for supposing that William Wenman Seward was a contributor to the pages of the *Anthologia Hibernica*; his name, however, figures amongst the list of the subscribers to that publication during its existence.

William Sleater, printer and bookseller at 51 Castle-street, whose name we have already mentioned in connection with Robert Jackson of Meath, as publisher of Rutty's "Natural History of Dublin," removed to the New Building, 28 Dame-street, some time about, or shortly before, the commencement of the last century. In Dame-street Sleater carried on the combined business of printer, publisher, bookseller, and stationer. He is also known as the publisher of *Sleater's Dublin Chronicle*, commenced in 1787. A short sketch of the life and character of Captain Grose, the antiquary, appeared anonymously in *Sleater's Dublin Chronicle* on the 25th May, 1791. This sketch was from the pen of Joseph Cooper Walker, the antiquary, and member of the Royal Irish Academy. Grose died on the 16th of May in the above year, and was buried in the village churchyard of Drumcondra, near this city. Gandon, the architect, and Grose were attached friends, and, when the architect died at an advanced age in 1822, he was by his own desire buried in the same grave as his friend the antiquary. The sketch of the life of Grose in *Sleater's Chronicle* was afterwards re-published, we should have added, in the *Anthologia Hibernica* for 1794. An extract from it will not be out of place here, for it indicates that a monument was contemplated to the memory of Grose in this city:—

"A very beautiful model has been made for this purpose by the ingenious and celebrated architect, Mr. Gandon, whose immortal works embellish this city in so superior a manner, and the Reverend Dean and Chapter of Christ Church has given leave to have it erected in their cathedral."

Captain Francis Grose came to Ireland to illustrate her antiquities, and he had made some progress with the work when his death occurred. The Rev. Edward Ledwich undertook to prosecute the task, and Lieutenant Grose, the nephew of the Captain, made a tour throughout the country, to take plans and drawings for the purpose. Volumes of the *Dublin Chronicle* are now very scarce, but they are indispensable in many particulars for local history purposes, as they were published during an interesting period in Dublin history, rife with political life and many-sided projects. Sleater's name is also associated with another publication known as the *Public Gazetteer*, published in this city several years previous to the first-named print.

#### NEW CHURCH AT RATTOO, CO. KERRY.

ON Wednesday 20th ult., the foundation stone of a new church was laid at Rattoo, Co. Kerry, by Wilson Gun, Esq., D.L., in the presence of many of the parishioners; the Rev. Mr. McEwen, Vicar of Listowel, officiating. This building, which has been designed by Mr. J. F. Fuller, F.S.A., Dublin, architect, will prove as neat a structure as exists in Kerry. It is Gothic in design, and will be composed of uncoursed rubble masonry, with Portland stone dressings in the buttresses, tracery, mullions, &c., of windows. The amount of the present contract, which does not include the tower or

belfry, has been given by Mr. Gun himself, and the site chosen is within the shadow of the ancient round tower, still in a fair state of preservation, which is chiefly due to the watchful care of Mr. and Mrs. Gun, upon whose property this interesting monument stands. After the stone was declared duly laid by Mr. Gun, the Rev. Mr. McEwen, addressing those present, regretted very much that the present state of health of Captain Gun, although improving, would not permit him to take a part in the excitement which the presence of his numerous friends would be sure to create, and this also was the reason of the bishop's absence upon this interesting occasion, who, it was long fondly hoped would conduct the ceremony. He was sure, however, that his lordship, as well as all those who would have attended, were with them in spirit, and would join in their prayer to God to bless the undertaking, and all concerned in the erection of another temple intended as a place of divine worship, and dedicated to the honour and glory of the Lord. The Rev. Mr. McEwen then paid a graceful compliment to the workmen, by alluding to the erection of Solomon's Temple at Jerusalem, and told his hearers that the names of all those engaged in building that wonderful edifice were recorded in sacred history. The ceremony terminated with the singing of suitable hymns and benediction. The erection of the new church has been confided to Mr. A. Crosbie, builder, Tralee. Mr. Dooner, the clerk of works, superintends the carrying out of the building.

#### ARMAGH SCIENCE AND ART CLASSES.

THE distribution of prizes and certificates to the successful students attending the above classes, took place on Monday, the 17th ult. The Countess of Charlemont, who has taken a great interest in the Art Committee, kindly undertook the task of handing the prizes.

The Very Rev. the DEAN of ARMAGH, presided.

In the course of the evening several young ladies displayed their vocal and musical abilities, and readings were given by the Rev. B. F. F. Dane.

The chairman of the Science and Art Class, in opening the proceedings, said:—"As chairman of the Science and Art committee, I wish to explain that for several years there has been a Science and Art class in this city in connection with the South Kensington Museum. We have enjoyed all the advantages of inspection by their officers, of receiving apparatus at reduced prices, and result fees, besides prizes and certificates. But hitherto our class was only a *Science* one, nothing was done in the department of Art. When you, Mr. Dean, were distributing the prizes for 1875, I ventured to express the hope that one day we might see an Art class, and that in this ancient city, famed as a school of learning in the early ages when from Ireland were going out to the Continent of Europe beautiful works of art in the illuminated copies of the New Testament, might again be revived a love of art. I confess I was only giving expression to what seemed a beautiful imagination, not likely soon to be realised, but others took it up. One of our vice-presidents particularly entered heartily into the matter, others assisted, and last year we had a school of art, attended by 70 pupils and conducted by Mr. Charles Gilbert. At three o'clock each Saturday during the session there was an average attendance of 32 young ladies; and about an equal number of young men, at eight o'clock. At the examination in freehand drawing 49 pupils presented themselves, and for model drawing 26 pupils. Twenty-three passed in freehand and 10 in model drawing. Three prizes were awarded for freehand drawing and 2 for model, besides many certificates, and five prizes were awarded for the work done during the session. I must make particular mention

of the case of Master John Boyd, who obtained the mark of excellence in model and freehand drawing, entitling him to two prizes, but by the rules of the department at South Kensington he can only receive one prize."

#### THE TYPE-WRITER, OR WRITING MACHINE.

WE are indebted to a London contemporary for a description of a new and wonderful machine named the "typo-writer," and we can only exclaim "what next!" The telegraph was a wonder, and is a wonder still; the sewing machine was another marvel; the type-composing machine amazed us next, and then came the telephone to startle us. The "typo-writer" is, of course, a modification of the type-composing machine, and it is well the inventive genius that produced it did not live in our grandfathers' days, or else he would have been stoned to death for his dealings with the devil,—but then there were always "printers' devils," although when they were grown men they were fond of their "chapel," which did not, however, prevent them from going to the "galleys."

The "typo-writer," which is on view at the premises of the Remington Sewing Machine Company, Queen Victoria-street, London, is one of the most remarkable of modern inventions. It will probably work as great a change in writing as the sewing machine has in the occupation of the sempstress. The paper, in any size up to the width of foolscap and of any length, is placed against a cylinder at the top of the machine. The writing is done simply by touching keys, which are compactly arranged in four rows (eleven keys in each), and may be operated by any finger of either hand. On each key is plainly marked the letter or character it represents. By depressing any key, the corresponding letter is printed on the paper. The "action" is as rapid and much easier than that of the piano. In the course of a very few trials the operation of touching the keys would become mechanical and rapid, and writing might then be done in a clear printing type at three times the ordinary rate of penmanship. The advantages of the machine are manifold. No manuscript, however well written, can of course be so readily perused as printed matter, and anyone—even a child—may soon learn to print perfectly with this machine instead of writing. For legal and literary work, where large amounts of matter have to be written, the machine will be invaluable, and it is admirably adapted to correspondence. If the machine comes into general use, it will do away with the hindrances, difficulties, and disputes arising from illegible writing, and make the conduct of business even more rapid than it is at present. Its use does not involve anything like the bodily fatigue caused by writing, and, being self-inking, there is no preparation needed to work with it. The machine will be a great boon to the blind, who can soon learn to write as well as persons who possess sight. Its only disadvantage is one common to all machinery—that the work to be done must be tolerably straightforward. It will not do, for instance, to make odd entries in books, nor would it be worth while to make corrections with it. Otherwise the machine is perfect, if it is safe to speak with finality of any mechanical invention. The machine is in use in the Bank of England, the General Post-office, and many leading city offices.

Alas for the poor clerks and the legal scriveners! With Babbage's calculating machine perfected, and the "typo-writer" complete and in working order, there is only one more invention to smash this shivering universe into "smithereens." Who will win the laurel by inventing a "thinking machine"?—Who?

The Town Council of Edinburgh have resolved to memorialise Government to complete the Industrial Museum of Science and Art.



## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

LET us now return and see how poor old Smock-alley put in an appearance under Manager Brown. Though the campaign was short and the struggle a severe one, yet Brown's management was signalised by the bringing forward of a few capital performers. The manager had been for some time in the army, which he quitted for the stage; and he is represented by a historian of the stage as one possessing "an ease, and manner, and address which few could ever attain." His best parts appear to have been: Perez, the Copper Captain, Don John in the "Chances," Benedict, Bayes, Sir John Restless, and Barnaby Rattle. His Copper Captain was considered superior to Woodward's, and his Benedict equalled Ryder, who afterwards became a noted actor and manager of the Dublin stage, and who had enlisted under Brown's standard, and even at that early date was considered a valuable acquisition.

Among the other actors of merit in the company were: George Stayley, a comedian of some ability, and also known as author of a farce entitled "The Rival Theatres, or a Playhouse to Let" (1759); Hurst, Heaton, and Walker, actors of merit, the latter well known to Dublin audiences; also Johnston, Adcock, and Mahon, all pretty well known at the period. Among the lady actors were: Mrs. Ibbot, described as an excellent actress; the two Miss Phillips, Miss Willis, Mrs. Adcock, and Mrs. Johnston. Mrs. Ibbot was a good speaker, and played many parts in tragedy, and in the characters of Mrs. Heidelberg, Lady Wrangle, and Mrs. Oakley she was superior to many in that line. At this time there were three Miss Phillips, sisters, connected with the stage—English ladies of good education, who had entered on the stage while young. They performed in tragedy and comedy respectively for several years. The eldest Miss Phillips died unmarried at York, where she lived for some time; and of the other two, one became a Mrs. Usher, and the other was distinguished afterwards as the mother of the celebrated actress, Mrs. Jordan.

To Brown belongs the merit of introducing the famous Mrs. Abington upon the Dublin stage, at that time very young. Wilkinson, in his "Memoirs," tells us that "before this she had played a few parts at Bath, where Brown was manager; also at Richmond, and a few chance plays with Theophilus Gibber in the Haymarket." When Brown was in London on his theatrical recruiting service, the appearance and acting of Mrs. Abington, who had been at Drury-lane with Garrick, attracted his attention. Having a good opinion of her talents, Brown commenced his capture by offering the actress every leading character she should desire. Dublin at the time presented perhaps a better field for the display of her opening powers than London. Brown's offers were accepted, and, accompanied by her husband, she embarked for Dublin, arriving early in December. The manager had returned to this city at the end of the preceding month.

Brown set about repairing and decorating Smock-alley, as far as his scant exchequer allowed him; and, having made the necessary preparations, opened on the 11th December, 1759, with the comedy of the "Stratagem." In this piece Brown himself played Archer; Mr. Waker, Scrub; and Mrs. Abington, Mrs. Sullen (her first appearance on the Irish stage). For this opening night Brown spoke a prologue, written by himself, bespeaking the patronage and protection of the town. There was a respectable audience on the first night, for many of the old playgoers were interested in the fortunes of Smock-alley, and hastened on the occasion. On the following Wednesday, Brown appeared in his favourite character of Benedict, and Mrs. Abington as Beatrice, which Hitchcock tells us "were as truly capital pieces of acting as ever were presented to the public." Each night added to Mrs. Abington's reputation,

and before the close of the season her success was so great that she was considered in Dublin one of the first and most promising actresses on the stage. Brown himself, notwithstanding the financial difficulties that beset his path, was acknowledged (said an author already quoted) equal to any living comedian in such characters as Brass in the "Confederacy," Bayes in the "Rehearsal," Ranger in the "Suspicious Husband," Sir John Brute, Felix, Roebuck, Marplot, Dr. Wolf in the "Non Juror," Don John in the "Chances," Monsieur Le Medecin, Lord Chalkstone, Aspin, and Abel Drugger. In the following pieces Mrs. Abington was said to have surpassed the most sanguine expectations:—Corinna, Clarinda, Flora and Violante, Lady Fanciful, Leathe, Maria in the "Non Juror," Second Constantia, Fine Lady in "Lethe," &c.

Tate Wilkinson's arrival in Dublin strengthened Brown's company, by whom he was engaged as soon as he arrived. Wilkinson, in his "Memoirs" (which we have previously alluded to), gives several particulars of this campaign, the incidents of which Hitchcock thinks he relates with much accuracy and fidelity, though others have held a less high opinion of its merits as a truthful compilation. Wilkinson appears to have had large and good connections with Dublin, and general opinion at the time, if we are to credit some of our historians of the stage, gave him the preference to Foote. Wilkinson's terms were, shares above twenty pounds, and a clear benefit; the former resulted in little profit, but the latter was highly productive.

On January 4th, 1760, Wilkinson appeared after the comedy of "Much Ado about Nothing" in the "Divisions of the Morning," one of Foote's pieces, not previously acted in this country. He was well supported on the occasion, and greeted with applause. Caricature, to use a common remark, has always "gone down" well with Dublin audiences; and Wilkinson's mimicry of the mimic, his friend and master, Foote, was relished. On this occasion his imitations of Foote were highly successful, and repeated on the following Monday, after Brown's Shylock and Mrs. Abington's Portia, the house bringing about £40. The afterwards popular farce of "High Life Below Stairs," which continued to be acted on the Dublin stage with success for several years into the present century, was introduced at this time at Smock-alley. Fortunately for the latter theatre, it had been overlooked by the Crow-street managers, but it was luckily fixed upon by Wilkinson. Mrs. Abington approved of the selection, and consented to play the part of Kitty. The piece had been brought out a short time previously at Drury-lane, London, where it met with success. Brown's company was fully equal to the performance of this piece, so it was put upon the stage with expedition.

Wilkinson, in his "Memoirs," written several years afterwards, tells us—"Mr. Ryder's Sir Harry was a very excellent piece of acting, and helped the piece materially. A Mr. Gates, a very conceited actor, played Lord Duke. His faults and oddities served but to heighten the extravagance of the character. Mr. Heaton's Philip was as well as such a part could be. He was a very good actor in dry clowns, clodpoles, &c. Miss Philips (aunt to the present Mrs. Jordan), our heroine, also of a conceited turn, though sensible and well educated, made the part of Lady Bab better than any other actress I ever saw attempt it. Myself, from observation and youth, must have been stupid not to have made a very good Jemmy, the Country Boy; and, as the great personage always appears last in triumphal entries and processions, so in Miss Kitty, Mrs. Abington advanced. The whole circle were in surprise and rapture, each asking the other how such a treasure could possibly have been in Dublin, and almost in a state of obscurity; such a jewel was invaluable, and their own tastes and judgments, they feared, would justly be called in question, if this daughter of Thalia was not immediately taken by the

hand and distinguished as her certain and striking merit demanded."

The farce of "High Life Below Stairs" was so well received and enjoyed, that it was repeated upwards of a dozen of nights during the remainder of the season. We are also told that it was customary at this date in Ireland to end every comedy and opera with a country dance by the characters, which had a pleasing and enlivening effect on the spectators. There was a particular tune to which the Smock-alley manager danced, which was called "Brown's Rant." In the course of the performance, as he and his partner advanced to the lamps at the front of the stage, Brown had a peculiar step which he "quaintly tipped off to his advantage." The audience always in expectation of this repaid the manager with applause. Our authority says that Brown, in his own personal character, was a sort of misanthrope, and was seldom seen but on the stage, and that his real name was believed to be Doyle.

The struggle after a short time became too severe for Smock-alley, notwithstanding the great merit of many of the performers. The manager was unable to contend against the overpowering odds arrayed against him by the Crow-street managers, yet he manfully fought out his short management as long as he was able to hold his company together. The bill of fare was varied by him as often as possible, and if the manager himself could make half parts of himself as well as whole ones, he was not unwilling to try the experiment. We find him appearing alternately in Benedict, Richard, Captain Macheat, Copper Captain, Old Norval, Roman Father, and other parts. As Hitchcock puts it, "Though he displayed much merit, and was in several aided by the rising favourite, Mrs. Abington—though Mr. Ryder was allowed to be a promising and rising actor—though Mr. Hurst, Mr. Heaton, Mr. Stayley, Miss Phillips, Mrs. Ibbot, and several others had distinguished themselves, yet, still was all ineffectual. The receipts in common were from £15 to £40; many had good benefits, particularly Mrs. Abington, who had got up the play of 'A New Way to Pay Old Debts,' and who grew then so much the fashion that her house was crowded and brilliant." Tate Wilkinson, in his "Memoirs" (1791), leaves us the following description of his benefit at Smock-alley, in 1760:—"The weather on my benefit night was dreadful indeed—every combination of deep snow, storm, &c. Notwithstanding, the theatre overflowed from every part, and almost as soon as the doors were opened, even the orchestra was filled with gentlemen who got over; the greater part of the pit was laid into boxes. At Crow-street they acted 'Measure for Measure,' and received £120. A Miss Neale had a good concert, and there were debates that night in the House of Commons. The receipts of my house [Smock-alley] were £172, the greatest ever known at that time in that theatre. I mention this dreadful night as to weather, to have the reader to note what Dublin on a night of tempest, and streets covered with snow, could do even at that time when inclination prompted; as not my house only but each place I have mentioned was well attended, though Dublin was not by a full third, I have reason to believe, what it is now (1791.) The eagerness for admittance was so extraordinary that another night was desired for my advantage."

Being a little curious to find out the state of the weather in Dublin in 1760, and particularly on the occasion of Wilkinson's benefit, we hunted up some authorities upon the subject, including Dr. Rutty's Registry of the Weather, given in his "Natural History of Dublin." The following extract confirms Wilkinson's statement:—"In February, 1760, extremely variable, frequent rains and floods, some frosts and fogs; the 15th a great fall of snow, several fair days, often windy, it ended fair, calm, and mild." The 15th of the month was Wilkinson's benefit night at Smock-alley; and Hitchcock further confirms the statement already made, that on the night of the 15th there was "a very deep snow-storm."

\* See ante.



A slight sun-shower in Dublin often keeps would-be-religious folks from going to church, but we see in former days a very deep snow-storm did not prevent them from going to the theatres.

During his stay in Dublin, Wilkinson repeatedly acted King Lear, Zampti in the "Orphan of China," Mrs. Amlet in the "Confederacy," Lord Chalkstone, and Cadwallader, Mrs. Abington Becky. It was on Wilkinson's benefit night that "High Life Below Stairs" was first acted on the Dublin Stage. Early in March Wilkinson returned to London, highly satisfied with his visit to Dublin. The period of Brown's management was swiftly drawing to an end which finally closed early in May, 1760. Brown began his management with a dead weight upon his shoulders, and he greatly accumulated that weight during his short management. He had nothing to lose in the commencement, and there was a chance of his succeeding; and in closing, he had nothing to lose, for he had gained nothing, financially speaking, that could be taken from him. Many debts were contracted that were never afterwards discharged, and performers must have suffered many hardships, in consequence of want of means to pay them their salaries.

A play-bill of the time will illustrate the character of the entertainments, and as it is otherwise interesting, we furnish it as a theatrical reflex of Dublin nearly 120 years ago:—

*By permission of the Right Honourable the Lord Mayor, at the Theatre Royal, Smock-alley, For the Benefit of Mr. Samuel Johnson, On FRIDAY, the 7th of MARCH, 1760, Will be presented a Comedy called*

*THE CHANCES.*

Don John, by Mr. BROWN; Don Frederick, by Mr. MARON; Don Antonio, by Mr. JOHNSON; Duke, by Mr. ADOCK; Petruccio, by Mr. STAYLEY; Peter, by Mr. MITTIER; Anthony, by Mr. JOHNS; First Constantia, by Miss PHILLIPS; Landlady, by Mrs. ADOCK; Mother, by Mrs. JOHNSON; Second Constantia, by Mrs. ANNOTON;

After the play—*Bucks have at ye all, by Mr. VERNEL (being his first appearance).*

To which will be added a Farce, called

*THE SHEEP SHEAKER.*

Pan (with songs in character) by Mr. MARON.

Antileus (the Pedlar) by Mr. VERNEL, with entertainments of Dancing, as will be expressed in the bills for the day.)

Tickets to be had at the Fruit Shop, opposite the Hoop Petticoat, in Smock-alley; and of Mr. Johnson, at Mr. Nugent's Glass Ware House in Copper-alley. Places in the Boxes to be taken of Mr. Cullen, Linnen-draper, Bridge-street. Boxes and Lattices, 5s. 6d.; Pit, 3s. 3d.; Gallery, 2s. 2d.; Upper Gallery, 1s. 1d.

Printed by Augustus Long, in Essex-street.

It is worth while comparing the above bill with one of the present day. Was the "Hoop Petticoat," we wonder, a vintner's sign or a draper's one. Earlier in the eighteenth century than 1760, when there was a performance in Fishamble-street for a charitable object, the ladies were kindly advised to leave their hoops aside for that night, and by so doing the house or the seats would contain a greater number of visitors, and consequently the proceeds would be larger. Though Smock-alley as a thoroughfare has long since been wiped out in name, Copper-alley still exists, but narrow, dirty, and dingy, and not the respectable place it once was. Wealthy citizens and merchants once resided there. In Bishop Bedell's "Diary" there is the following entry which he made after he landed in Dublin from Holyhead, in 1627:—"August 12. Came to Dublin in the morning, and lodged in Copper-alley at Dr. Siler's house. In the afternoon went to the Lord Deputy." The future Provost of Trinity College, and the afterwards Bishop of Kilmore found, we dare say, Copper-alley a pleasing place to lodge in in 1627. Would a provost or a bishop in these days like to be located there now "all the year round"?

But we are digressing. Smock-alley, under Brown, having closed its doors and dropped its curtain, we have to return to Crow-street to witness the performances there, and to await fresh complications and a new opposition under Henry Mossop.

**A BIG BLOCK OF GRANITE.**—There was recently quarried, without the use of powder, at the Barre Vt. U.S. granite quarries, a block weighing about 618 tons—being 40 ft. long, 17 ft. broad, and 10 ft. thick. This stone is believed to be the largest ever quarried in the State.

## VITAL STATISTICS.

THE Registrar-General's Quarterly Return has been published. The health of the people throughout the quarter has been good, and the state of sanitary progress satisfactory. But in some cases there are very serious exceptions, as in Cork, where the portion of the river in which thousands of citizens daily bathe is converted into a cess-pool by the nuisances which flow from the Queen's College and the County Gaol. Why an epidemic of fever has not long since broken out the registrar can only attribute to an all-wise dispensation of Providence. He says it is idle for him to report the matter to the local boards, because they will take no action.

In Carrignaros, in the Cork union, the district registrar reports that the people are in a deplorable state for water, and while those who can afford it pay 4d. a barrel for water conveyed to the town from a well three miles distant, those who have not the means must chance their luck, and drink ditch water.

In the Kilworth district of the Fermoy union a family of six to eight or ten persons occupy a sleeping-room 10 ft. by 14 ft.; but this performance is beaten in the Dingle union, where "there is a house in which the fever was, that is only 10 ft. long and 12 ft. broad, containing the father and mother and eight children, 2 cows, 1 ass, 2 pigs, and 12 or 13 hens." The registrar of the Castlegregory district, in the same union, says there is no hope of promoting cleanliness among the peasantry "while they are permitted to keep pigs in their houses;" while in the Rathfriland district of the Newry union the registrar says "the sanitary state of this district is very much improved, owing to the agency of the Public Health Act compelling the people to live alone in their houses, without pigs, goats, hens, ducks, or donkeys."

The registrar of the Londonderry union considers the Sanitary Act a "dead letter"; and in Carrickmacross the registrar thinks that an expanded organization, with an increased staff and periodical visitations, under a supreme central authority, if provided for in an amended Public Health Act, Ireland, will almost banish zymotic diseases from the country.

## THE STOBECROSS DOCKS, GLASGOW.

On Tuesday, 18th ult., the western portion of the above docks was opened for the reception of vessels by the Lord Provost of Glasgow, who was assisted in the ceremony by a large number of gentlemen belonging to the surrounding district, together with many connected with the various public bodies of the city itself. The great undertaking, it may be remembered, after being divided into four contracts, was begun about five years ago, and it was the first of those contracts which was partially opened yesterday. A full description of the docks has already appeared, and it is only necessary to mention that when the dock is finished the water surface will extend to 3½ acres, the length being 3,000 and the breadth 700 ft. Access to the basin is obtained at the south-western extremity, the passage being 180 ft. wide. On the north side the wall of the quay is founded to the depth of 41 ft. below the level of the quays. After the trenches were made to low-water depth cast iron shoes were laid down, and on the top is the concrete work, the cylinders being sunk to the required depth, and then the superstructure of masonry is added. The latter consists of a wall of heavy ashlar facing, with massive concrete rubble backing. A central quay of 270 ft. by 195 ft. passes from the eastern end, and is parallel with the north and south side walls. A strong iron swing bridge, 800 tons in weight, and 181 ft. long by 40 ft. broad, is regulated by hydraulic power, supplied by powerful appliances from an engine-house close by, and which, by means of pipes, can be connected with cranes and similar machinery at any portion of the dock. The engine-house is handsomely got up with all modern improvements, and is surmounted by a tower, in which a clock and chime of bells have recently been placed, and will no doubt be of much service to the busy locality which in a few years will gather itself round the docks, when the work of three basins is completed. The ceremony began sharp at the advertised time (11.30 a.m.) under the most favourable weather auspices. All around the docks and the vessels in close proximity presented a gay appearance with well-displayed bunting, and the crowd which assembled around was very large. No labour had apparently been spared in decking off the Anchor liner Victoria, under the command of Captain Young, which was awaiting at the gate for the signal to enter as soon as the bridge was brought round. The Lord Provost then stepped forward to where the lever which started the bridge was placed, accompanied by Mr. Deas and several members of the Harbour Trust. Here a neat crimson cloth was laid over the granite capping, and on the top of the lever the gold head of a Malacca cane had been placed. His lordship then handled the lever, and the large bridge began to move round towards the north side, and when this was going on the band played "Rule Britannia." After the opening was made, the Lord Provost said—"It is now a matter of official duty for me to declare this dock open for the reception of vessels, and it shall hereafter be known by the name of 'The Queen's Dock.'" Most appropriate for the occasion, the first ship that shall enter it is named the Victoria. The s.s. Victoria, in tow of the Lord Derby and Mariner, was afterwards successfully docked and berthed on the opposite side, and while this was being done the crowd gave several rounds of hearty cheers. Meanwhile, arrangements had been going on for a display of blasting at one of the unfinished contracts on the other side. Twenty-one shots were fired by dynamite charges, throwing large quantities of earth and clay into the air at short intervals. The Victoria also discharged two of her guns by way of reply. The bridge having been swung back to its original position, the company, preceded by the band playing "Rule Britannia," passed to the south side, and entered one of the large sheds, where luncheon was provided.

## ADVERSARIA HIBERNICA,

### LITERARY AND TECHNICAL.

It is worth while comparing the price of labour and the cost of materials for some species of building work as it existed eighty years ago, and as it exists at present or lately. At the former period and even now in some localities the building operative worked from 6 a.m. till 6 p.m.; and whether he was a mason, bricklayer, carpenter, or joiner, or any other member of the building trade, his labour was far more exhaustive, for all branches were solely conducted by manual labour. From the sawyer to the slater, machine work was unknown; and the hand and hand-manipulated tools performed the whole of the labour. Although skilled building operatives received less than half of the present rates of wages, the work performed was in many respects better executed, for it was more firmly and honestly put together, and the materials were, with few exceptions, superior in quality. House rents were lower, provisions were more cheap, but the housing of the skilled artisan and labourer was not in a general way as good as at present. The public health was uncared for, disease was rife in towns and cities, and the drinking habits of our artisans, considered in respect to the time and the facilities that existed, were as bad in many respects eighty years ago as they were twenty years since. Combinations among workmen were not very frequent eighty years since, but they occasionally took place, and the laws were severe and one-sided. With these few preliminary remarks we will now present the building





DESIGN FOR TOWN HALL



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reader a carpenter's day bill of the period of which we are speaking:—

	s.	d.
For each man, per day - - -	3	6
For every single hour - - -	0	4½
For a pair of sawyer scntting old stuff, per day - - -	7	6
Fir timber per foot cabc - - -	2	0
Ditto for use and waste in shoring - - -	0	8
Ditto for good old fir timber - - -	1	4
Ditto for good oak timber - - -	2	6
Ditto for new oak in scantlings not more than 12 ft. and 10 in. square - - -	3	6
Ditto for new oak, die square - - -	4	0

At the present hour in London the masons are claiming and getting from many employers 10d. per hour, and the carpenters and joiners, we suppose, will be following suit shortly. Going back two or three years, let us say that the masons, carpenters, joiners, bricklayers, and some other workmen were receiving from 8½d. to 9d. per hour. This rate of wages would then be exactly double what they received not only eighty years since, but in some cases even forty years ago.

Let us now produce an estimate of the cost of a rod of brickwork in London eighty years ago, or in the early years of the present century. Let us suppose a bricklayer and labourer performed a rod of brickwork at one and a-half brick thick in five days, at 3s. per day, his then wages; the labourer at 2s. per day; bricks, 25s. per 1,000; lime at 6d. per bushel; sand, 3s. per load:—

	£	s.	d.
One bricklayer 5 days - - -	0	15	0
One labourer, do. - - -	0	10	0
4,500 bricks to the rod - - -	5	12	6
32 bushels of lime, at 6d. per bushel - - -	0	16	0
2½ loads of sand - - -	0	7	6
<b>£8 1 0</b>			

It is to be remembered that the carriage of all materials is to be added to the above estimates. The building operative is in a position to compare for himself the above rates with what they are at present. The bricklayer, slater, mason, carpenter and joiner, plasterer, and glazier, all recently received, let us say, 8½d. per hour, the plumber 9½d., and the painter 8d. Paper-hangers are paid at so much per piece—8d. to 1s. Brickwork is measured in different ways in various localities; but, taking London for a general rule, the "rod" is 272 superficial feet of walling 1½ in. thick (equal to 1½ bricks). This is termed "reduced" or "standard" thickness. The market price of picked stock bricks on the wharves in London was taken two or three years ago at 38s. per 1,000; stocks, 35s. per 1,000; place, 24s. per 1,000; lime, 13s. per yard; sand, 6s. Calculating brickwork and mortar, place bricks being used, the per "rod" reduced would cost £11 10s.; if three-quarters were place bricks and one-quarter stocks, £12; if half were stocks, £12 10s.; if all were stocks, £13 10s. The above estimates include mortar composed of greystone lime, river sand, including all materials, with scaffolding and labour. It will be seen that a rod of good brickwork, with all stock bricks, costs at present or lately £13 10s., compared with the first-given estimate of work performed eighty or fifty years since.

It is worthy of notice in respect to the above old and new prices of building labour, that our present-day speculative or "Jerry" builder not uncommonly pays the building workman as good wages as the respectable class of builders; but what he loses in wages he makes up in the cheapness or badness of his materials. He builds "to sell," and the "dry-rot" sets in immediately after his "scamped" work is finished. The doctor is a constant visitor to the occupants of his houses, or rather the houses he built and parted with; the undertaker follows next, and then—aye, and then the last "lock-out" is accomplished!—"Sans eyes, sans taste, sans everything."

Epitaphs in all ages have excited some interest, and many of them have a historic

value in centuries after they have been written. It is unsafe, at the same time, to accept them always as the honest reflex of characters or feelings, for death often wipes out the animosities existing between friends, and even public men, whose position often makes them rivals, if not opponents of each other. On the tombs, however, of public men, as well as of private individuals, there is often overloaded sentiment and exaggeration. It is strange that one's contemporaries will not acknowledge your merit in life, but, as soon as the grave is closed over your poor and helpless body, and your mind that once scintillated with the fire of genius is extinguished, your talents are suddenly discovered, and the praise you should have got to cheer you in life is trumpeted to the world when you can no longer hear it. Fulsome obituary notices, too, precede the burial of private and public individuals of a little social standing. Lords are belauded, and estated grandees are bepraised; but if you die a pauper, you are seldom honoured with an epitaph, unless you were once notable, and then your misfortunes and failings, as well as your good parts, are bracketed together in an obituary notice.

Let us select at random from an Irish periodical of the last century a few obituary notices, without remarking whether the ones in question were well or ill deserved. We merely give them to illustrate the literary style of the time in that department of literature:—

"On 6th of February [1793], the Earl of Barymore—His lordship, who had a command in the Berkshire Militia, was conducting some French prisoners from Rye to Dover, and halted at Folkestone, to refresh his men, when stepping into his gig, a fusee that lay in it went off, and shot his lordship in the head, of which he almost instantly died. He was the seventh Earl of Barymore, and married a niece of the present Lady Lade, who is now pregnant; if she should have a son, the honours and estate of the family descend to his lordship's next brother, the Hon. Henry Barry."

There is nothing amiss here,—a simple statement is given, and no sentiment or eulogy is indulged in. Here is a somewhat interesting notice of the death of a literary farmer, on the 15th of the same month and the same year:—

"At Ballyhaast, Mr. James McCully. He was an ingenious experimental farmer; he was author of "The Farmer's Letters," a work that does honour to his genius, and shows a comprehensive knowledge of the subject. In his public character he was a friend to the rights of the people, and a firm asserter of the principles of civil and religious liberty. In private life his conduct was steadily directed by a strict regard to the rules of pure morality, and seasoned with just and rational views of religion; his virtues were of the active kind, and his heart was ever alive to the impressions of humanity, and the pleadings of distress. His temper was in general reserved, but in moments of social intercourse he could unbend; in his cabin he exercised his favourite hospitality; it was there his countenance kindled at the sight of a friend; there he fed the hungry and clothed the naked.—Reader, fix your eyes upon his character and imitate his virtues."

Our Irish literary farmer may have been a very praiseworthy character, for aught we know; but we are certain if the above notice was presented to him the day before his death, as the one that would form his obituary, Mr. James McCully, if he was then in his right mind, would repudiate it. The above specimen is not of the very extravagant order of obituary notices, but it partakes too much of the lavish kindness of friends, or professing friends, after your death who were very chary of their praises during life. The writer of it would be content, we have no doubt, to see it adopted as the epitaph of the farmer, with all the needful additions, notwithstanding its length.

On the 20th of the same month in the same year, we have another specimen of the same style of obituary notice, given as follows:—

"At Newtown Pery, Limerick, Lady Harstonge, wife of Sir Henry H. Bart, and sister to the Right Hon. Lords Pery and Glentworth. This worthy woman was pre-eminently distinguished through

life for exemplary piety, for unaffected humility, and unbounded charity. With strong discernment and sound judgment she possessed the most humane disposition, which, united, were constantly and uniformly directed to the most benevolent purposes. Private distress was relieved by her in secret, while institutions of public charity flourished under her inspection and her bounty. The grateful prayers of countless numbers, who were raised by her from sickness and sorrow, ascend to heaven, and gave her pious labours the christian hope of this glorious introduction—"Well done, thou good and faithful servant; enter into the joy of the Lord." On the 24th inst., her ladyship's remains were conveyed to Bruff, to be interred in the family vault. It was the most numerously-attended funeral seen for many years; the shops throughout this city were shut on the occasion, and a general gloom pervaded all ranks."

Two or three very brief obituary notes will conclude our present extracts:—

"In Abbey-street [February 22, 1793], Dublin, Daniel Marston, Esq., an eminent and wealthy merchant and sheriff's peer, a man of unsullied reputation."

Marston sat as a member of the Corporation in days when money was to be made, and some of it easily. He resided at 11 Abbey-street.

"In Coldblow-lane [April 1, 1793], Mr. Robert Roe, of Ringsend, an excellent chemist and natural philosopher."

"At Warrington, County Down [April 12], in the 83rd year of his age, Samuel Warring, Esq. To this gentleman, and his very respectable family, the linen manufacture, at the elegant family seat and ornamented demesne of Warrington, is much indebted."

Here is the demise recorded of the nephew of the celebrated George Faulkner, "the Prince of Dublin Printers":—

"At Bray, Mr. Thomas Todd Faulkner, printer to the City of Dublin."

And about the 29th of the same month we have the brief, but still more noticeable announcement of the death of the accomplished daughter of Henry Brooke, the dramatist, and authoress of "The Reliques of Irish Poetry." It is thus given in the periodical from which we quote:—

"At Cottage, near Longford, the celebrated and accomplished Miss Charlott Brooke, of whom in our next we hope to give some interesting anecdotes."

Nearly a twelvemonth, however, passed over before the monthly magazine in question furnished a sketch. Her father had predeceased her in November, 1783. Some lines "To the memory of Miss Charlotte Brooke" appeared in the first volume of the *Anthologia Hibernica*, shortly after her death, by an "unknown hand," but forwarded to that magazine for publication by J. C. W. (Joseph Cooper Walker), the antiquary, and author of several well-known works.

What were the ships of the ancient Irish like? Patrick O'Flaherty, in his "Ogygia," discourses upon them in his chapter on Achy Fuarch, the sixty-third king of Ireland, in the year 3508:—"Achy, surnamed Fuarch, from the wicker hurdles that were covered with hides, which he used in putting his men on shore from the vessel, where he spent two years committing piratical depredations of the Hibernian descent, was declared king of Ireland after the decease of his predecessor." (Hely's translation.) Further on O'Flaherty discourses on vessels at a later date, early in the Christian era, not differing much from the primitive ones. He writes:—

"We may conceive the structure and form of ships of this sort, although we can form no idea of the bulk, strength, or warlike apparatus of them, from the life of St. Brendan in a manuscript book of Carthusias Moguin, in the following manner:— They made a small ship, exceedingly light, lined with ribs and with timber formed like pillars, as it is the custom of these countries; afterwards they covered her with hides of oxen, having made them red; then they daubed all the outside ligatures of the skins with butter, and they brought with them in the vessel two more hides prepared for use, and all necessaries for forty days. They likewise took with them a quantity of butter, in order to prepare the skin for covering the vessel, and every imple-



ment and utensil, with the necessities of life. They also fixed a mast in the middle of the ship, and sails, and all things necessary for steering the vessel. The description of another author of the life of St. Brendan, in the *Insular Book*, of the structure of these ships, coincides with the foregoing account:—They fitted out a small ship, very light, made of the pine tree, as is the custom of the country, and covered it with the hides of oxen, made red, and daubed all the outside joined parts of the skins, and took with them necessities for fifty days, and every requisite for the use of the vessel."

If, when the Roman power was declining in Britain, the Celts or Scots of Ireland made a descent on the sister kingdom in a fleet of this kind, it will give the reader some notion of the naval architecture and warfare of our far-back ancestors. There were no powder or guns or torpedoes in these early times. The respective crews paddled their own canoes; and we suspect the principal fighting, whether with arrows or clubs, took place on shore. If we are to believe our old chroniclers, wonderful voyages were made in these ancient hide-covered vessels, "with a prow, stern, sails, keel, sides, oars, and provisions," and a number of passengers betimes. What "bold navigators" those ancient skippers must have been, with fixed stars for their compass, voyaging in their buildings afloat.

H.

### BUILDING IRREGULARITIES AND "JERRY" BUILDINGS.

THE annexed correspondence and proceedings, which we transfer from a London metropolitan journal, the *Hackney Express*, will possess an interest for several of our Dublin readers. The subject in all its bearings otherwise is also important, for of late speculative building in Dublin and its environs is rife, and building irregularities common. Here, as well as in London, red tape and circumlocution are common, and though the evil doers are known, it is almost impossible to get the responsible corporate and other authorities to do their duty. In our corporations and other local boards the real evil doers are sitting as representatives of the people; but, being the employers or masters of the officials, the latter for obvious reasons shirk what they consider an invidious task. On rare occasions a public official does his duty in an independent manner, but the occasions are so rare that it ends with no practical result, for open violations of the sanitary laws and the building act continue, after the "nine days' wonder" has ceased. If only a few of the ratepaying citizens were to band themselves together, and take the bull by the horns, by enlisting the aid of the central authorities, the local authorities would be compelled to enforce the acts which they are empowered to administer for the public safety and the public health. At the last meeting of the Hackney District Board of Works, the clerk reported that he had received the following correspondence with reference to certain buildings at Hackney Wick:—

"I am directed by the Local Government Board to forward to the Board of Works of the Hackney District, for their information, the enclosed copy of a letter which has been addressed to the Board by Mr. C. Clinton Hoey, of the Broadway, South Hackney. J. ROTTON, Assistant Sec."

"SIR,—There are some streets of new houses of a speculative class now being erected at Hackney Wick, whose character, material, and surroundings call for the closest attention. I have no hesitation in saying that as to quality they are far worse in parts than those which were the subject of a recent newspaper prosecution in this district. Whether the Metropolitan Board of Works Surveyor has had his attention drawn to these houses I know not, but I have reason to believe that the Local Board officials of Hackney have received some intimation of the character, foundations, and materials of these new buildings, intended for the working classes. It is not my purpose at present to describe in detail the construction of these houses, but I will be prepared to compare notes hereafter with any professional person who may be called upon to report at the instance of the Local Government Board, in the interest of the common weal and the public health. C. CLINTON HOEY."

The clerk said that on the 17th August he wrote to the Local Government Board in reply, informing them that the matter referred to in their letter was not within the jurisdiction of the Hackney Board, but that he had forwarded a copy of the letter to the Superintending Architect of the Metropolitan Board of Works. On the 24th August he received a letter from the Metropolitan Board, enclosing a copy of a report made to Mr. Vulliamy by the District Surveyor of Hackney, as follows:—

"SIR,—I regret to say that most of the houses of a speculative class in the neighbourhood referred to, as elsewhere, are of such a character as to require the closest attention. In the case of some which had recently been erected, I more than once cautioned the foreman with regard to the brickwork, and on my last visit required a portion of a party wall to be taken down, course by course, in my presence. The result, however, was more satisfactory than I expected; and upon having a promise from the builder that in all future work not less than one-half of the bricks used in the walls should be whole bricks, I took no further steps. I recently also had to require another builder to pull down six walls which I considered were improperly built, and his work is now more satisfactory. On the 14th of this month I obtained a magistrate's order against a builder to pull down a building, the walls of which were not in my opinion built satisfactorily. The quality of mortar is so difficult a question to deal with under the Building Act, that I feel myself unable to do more than remark on the bad quality of it and carry away a sample. The word 'surroundings' I may suppose has no bearing on matters coming under my cognizance as district surveyor, and I am unable to speak to the second quotation, as I have not before me any facts relating to the buildings 'which were the subject of a recent newspaper prosecution in the district,' and do not know what buildings are referred to.

FREDERICK MEESON."

A copy of the above letter having been sent to the Local Government Board, on the 4th ult. the clerk received a reply from that Board thanking him for the same.

Mr. G. B. Holmes, in remarking upon the correspondence, said that he went that afternoon through the streets where the speculative buildings referred to were being erected, and he could corroborate what had been stated. The mortar was composed of cinder siftings from the sewers, and in his humble opinion the drains which were being put in were totally inadequate. They consisted of 12-inch pipes, laid in soil composed principally of dust and refuse. A little sand was being used for cement work, but for other purposes the mortar was manufactured from cinder siftings.

At the same meeting, Mr. G. B. Holmes, pursuant to a notice, called attention to the various obstructions upon the public paths in the district; and also, in pursuance to another, moved *re*

### BUILDING IRREGULARITIES:—

"That in consequence of several apparent building irregularities having arisen in various parts of the district, this board deem it expedient that a full inquiry should be made into the subject, and that a special committee be appointed to consider the whole matter, and to report to this board."

He remarked that some of the irregularities to which he desired to draw attention had already been spoken of that evening—for instance, those in Norfolk-road—and the Board had heard the Surveyor distinctly say that in his opinion they were not irregularities at all. Now the 75th section of the Metropolis Amendment Act, 1862, stated—"That no building, structure, or erection, shall without the consent in writing of the Metropolitan Board be erected beyond the general line of buildings, in any street, place, or row of houses in which the same is situated, when the distance is 50 ft. from the road." The Board were aware of what had taken place in Duncan-street and other thoroughfares which were now under the consideration of a committee, but it was the opinion of the Surveyor that this board had no control. This Board were the executive of that Act from which he had quoted, and yet they had an officer who said that a man could build the flank wall of his house wherever he liked

and the Board could not interfere. To test the question he had made inquiries of several vestries and of Mr. Vulliamy, the Superintending Architect to the Metropolitan Board, and he had been assured that a man had no power to build even a bay-window beyond the line of frontage. If the Board went to Brook-road, which was an old-established road, and where there was an old-established line of frontage, 14 ft. from the entrance to the forecourts they would find that a man had built a house at the corner of Nightingale-road, and brought the flank wall of the building down the Brook-road, in a line with the forecourts, or 14 ft. in advance of the line of frontage. In Casslan-road, too, a man had erected a wall 10 ft. in advance of the other houses and had caused quite an obstruction and disfigurement in the road; yet the Board were told by the Surveyor that they had no control in the matter! Then as to the width of roads, the Board had been told by the Surveyor, in regard to Duncan-road, that they could not interfere. Had not someone interfered, a certain builder would have erected his house just where he thought proper. According to the Act, if old buildings were taken down in a narrow thoroughfare, new ones shall not be permitted unless the road be widened to 40 ft.; but the Surveyor had permitted buildings to be erected in one of the old streets, and the houses were not more than 9 ft. 6 in. from the crown of the road, instead of 20 ft., as required by the Act. As these irregularities had been permitted to a very great extent, he thought it was high time that some inquiry was made or some definite action taken. In Milo End, Islington, and other parishes, he could cite cases in which the Vestry had not waited for the Metropolitan Board, but had taken action themselves, and compelled builders to remove structures where they had trespassed beyond the line of frontage.

After a lengthened discussion, the motion to appoint a special committee was carried. We trust that their report will be a sound and satisfactory one. The appointment of a special committee to report upon building irregularities in Dublin is urgently needed, and we hope some independent member of the Corporation will speedily move in this very important matter.

### THE SCHOOLDAYS OF JOHN BRIGHT, M.P.

PREVIOUS to the distribution of the Queen's prizes and certificates of merit to the successful students connected with the Rochdale Equitable Pioneer Society on Tuesday evening, Mr. John Bright, in the course of a lengthy speech, said:—

Our object to-night is directed especially to the question of the promotion of Art and Science. Let me first say that there is hardly anyone in this room who has had the same opportunities of observation who knows less of science and art than I do. I am not in the least qualified to hold forth or speak on a question of this nature. Fifty years ago, when I was at school, they did not teach anything about art and science. I was at school in this town when a very small boy, but after leaving this town I was at no less than four others, considered very efficient and respectable boarding-schools on that day, and I never heard anything there, to the best of my recollection, about science, and very little about art. The last of the schools I was at is the one in regard to which I have the most pleasant recollections, for it was situated in a very nice valley, and by the side of a very pleasant river. The subjects were not forced upon us with undue harshness. We spent a good deal of time bird's nesting and fishing in the river Hodder chiefly for the trout, and, sometimes, frequently during the summer, in bathing in one of the ponds of that pleasant stream. I did not get much of what is called education, but what I got I would almost say was better, because whatever store of health I enjoy I got it in those days, but then one does not understand science and art. One at least can admire them and value them. I have read the works of many poets from which I derive intense pleasure, but I could not comprehend at all how the poet originated those pictures which he describes, and I could not tell how,



after having originated those pictures in his mind, he could put them in language of such a beautiful description. I could not comprehend how it was done, but I could admire the poems and read them, and feed my mind and spirit with the beautiful thoughts he placed before me. So with regard to science, we may know little, and I know very little of it, but I have a great appreciation of it and of those persons who have placed it at the service of all.

### THE GAS COMPANY AND THE PRESS.

At the half-yearly meeting of the Alliance and Dublin Consumers' Gas Company on Saturday, the chairman, in concluding his remarks on the affairs of the company, warned the editors of certain papers to measure their words in future, or —. There had been (he said) latterly some articles in the papers not at all favourable to that company. He always made it a rule whenever he was talking of the Press to speak with the greatest possible respect—it had arduous duties to perform. In the present instance the writers had far exceeded their privilege, as one or two of the articles did not hesitate substantially to charge that company with something amounting to fraud in selling the gas by false measures; in fact, making people pay for more gas than they consumed. That was a grave accusation in reference to a company of respectability and honour. These allegations had been brought under the notice of their legal adviser, whose opinion was that these statements exposed the journals which published them to heavy damages in a court of law. The company felt they did not require any vindication before the public. Neither did they wish to hold out any threats, but he would give notice on behalf of the company that if such unfair statements were repeated they could not be passed over in silence. He made that statement advisedly, as the company would not allow their secretary to be writing letters in explanation of such assertions. The writers of such articles appeared to be ignorant of the fact that there was a public examiner of the light, and at no time was it under the standard which they were bound to give; but it was invariably half a candle or three quarters of a candle over. If parties did not use proper burners the company were not to blame, and it was open to every consumer to purchase a meter of his own. It was hard that the company should be branded as defaulters and robbers by gentlemen who did not precisely understand what they were writing about. There were people who did not understand about the proper carbonization who would put on a burner totally unfitted to consume the gas they were about to burn. The fact was, that if the burners were not of the proper calibre, the effect was to throw off the carbon without making the proper illumination.

Mr. Thomas Brunker, in seconding the adoption of the report, said he respected the Press and those who represented it, equal to anyone and more than many; but he thought when dealing with a subject of such importance that they ought to know more before they spoke and lent their columns to those persons who wished to get up to the heaven of publicity on the backs of unfortunate companies they wished to batter at. The company had proved to the discerning public that they were wrong and the company were right.

In commenting on the above, old *Saunders* writes:—

"The chairman of the Alliance Gas Company professes a great respect for 'the newspapers,' and is good enough to acknowledge that they are most useful to the public. For fear, however, any of them should be just a little too useful, he informs them, in the style of the French President's Manifesto, that he will put the law in action against them if they keep on complaining of the company's extortionate charges and mysterious accounts. He does not condescend, however, to deny or to explain the specific instances we gave of certain gas consumers in this city whose bills mounted from year

to year, while the quantity of gas they burned remained stationary or declined. We shall resign ourselves to the realisation of the chairman's terrible threats. We spoke advisedly, and do not intend to retreat an inch from the position we assumed. The chairman tells us that every consumer is at liberty to use, if he pleases, any other meter than the company's. This is true enough, but he must use no meter which the company's officer does not examine and approve of. We join the chairman in congratulating the company on 'the more efficient working of the concern,' but we should join him still more heartily if the consumers reaped any benefit from this increased efficiency. We fear that a good deal of 'the marked extension of the consumption of gas' of which he boasts is a consumption in the meter rather than in the burners. Like the Russian army in Bulgaria, a large proportion of which is now ascertained to exist only on paper, a goodly share of the commodity supplied by Mr. Cotton figures only in the quarterly bills of the consumers, and lightens their pockets rather than their darkness."

[For the present we will content ourselves with the above. It is more than probable that before long the supply of gas and the mode of measuring it will be put on a different footing.—Ed. I. B.]

### GLASNEVIN AND DRUMCONDRA DRAINAGE SCHEMES.

Mr. P. F. Leonard, C.E., has issued an amended report on the above. He now suggests that the outfall should be at the point on the East Wall commonly known as the "Smoothing Iron." Mr. Cousins, C.E., also has forwarded a short statement, in which he gives his reasons for not being able to agree with Mr. Leonard as to his plan of dealing with the sewage of the district. We cannot on the present occasion go into the matter in detail.

### PROPOSED VISIT OF IRISH ARTISANS TO PARIS.

A CIRCULAR has been for some days issued by Mr. Henry Parkinson, as hon. sec. on behalf of a committee for organizing a deputation of Irish artisans to visit and report on the forthcoming Paris International Exhibition of 1878. The Lord Mayor has consented to act as treasurer. The object is a commendable one, and if there is any backbone in the movement we hope to see it carried through. A few years since a deputation of English artisans successfully performed a similar labour. Among our Dublin artisans there are, doubtless, several who can think and observe, and practically report upon trade and manufacture, as well as practically execute work of a high order in their respective branches of skilled labour.

### THE ELECTRIC CANDLE.

The electric candle is the invention of a M. Jablochhoff, a Russian engineer officer. It consists of two carbons placed side by side, with a strip of kaolin (china clay) insulating them from one another. M. Jablochhoff had found that kaolin, as soon as it became heated, diminished the resistance of the circuit sufficiently to permit of the electric light being formed between the carbons; also that, by the intense heat concentrated at this spot, the kaolin was volatilised; so that, in fact, when the "candle" was once lighted, it gradually burnt down, much in the same way as an ordinary candle.

The experiments at the docks were, unfortunately, not quite so successful as some that have been more recently carried out in Paris, although, in a great measure, they demonstrated the practicability of the invention.

One of the chief advantages claimed by the inventor is that he is thus enabled to divide the circuit into a number of different lights, as the resistance of the circuit is constant, whereas, by the ordinary system, this cannot be done, it being necessary to have a separate machine for each lamp.

The invention is certainly very pretty, and a good deal may be said in its favour; although, as to the practical advantage to be derived from it, with our present knowledge of the subject, and its great superiority over the ordinary system, is an open question.

One thing must not be lost sight of, namely, that the distance to which the current of electricity can practically be conveyed for light purposes is very limited; in fact, about 200 yards is the limit; so that the advantage of dividing the light by means of the electric candle is not so great as at first sight might appear, while the amount of light obtained when the circuit is divided is not so great as when one lamp only is used. True, the light is more diffused, but then a number of lights have to be attended to in the place of one, and the advantage claimed is not evident.

With the electric candle a neat form of lamp is used, which, by means of a simple mechanism, throws a fresh candle into circuit as soon as one has burnt out. The lamp is usually arranged with four candles, each burning about three hours, but the number of candles in the lamp could of course be increased if necessary.

Another plan of electric lights, also the invention of M. Jablochhoff, is that of passing a current of electricity through a piece of kaolin, which is thus rendered incandescent; by this means it is claimed that he can divide the current into a number of lights equal each to that of an ordinary gas burner.

From what has been already said, it is evident that there are a number of useful purposes to which the electric light may be both advantageously and economically applied, but that the time when it will fill the place of our present system of gas lighting, notwithstanding the rapid advance of electrical knowledge, seems as far off as ever.

### KINGSTOWN.

At the last special meeting of the town commissioners, several matters of a sanitary character were brought under the attention of the board, and led to discussion with a view to improvements. These included, among others, the providing of a morgue, the repair and cleansing of certain roads, &c. The town clerk, by the direction of the chairman, read an article from last *IRISH BUILDER* in reference to the sewerage works of the township. Mr. Carroll was of opinion that the journal in question deserved the thanks of the board for its favourable notice. Mr. Doyle, town surveyor, intimated his wish to have certain charges which he preferred sometime since against the head ganger of the men further investigated and completed. He also desired to examine Mr. Sexton, the contractor, on his behalf. The matter, after some expression of opinion as to the necessity of a settlement being arrived at, was ultimately postponed for future decision.

### BOOKS RECEIVED.

*Industrial Art.* Parts 3 and 4. London: Hardwicke and Bogue.

*The First Irish Book.* Dublin: M. H. Gill and Son.

*Dictionary of Mechanics.* Part 10. London: Cassell, Petter and Galpin.

A new street-cleansing machine, the invention of Mr. Warren, of Cheltenham, has been tried by the Vestry of Clerkenwell, who have its adoption under consideration.

The "Dublin correspondent" of a contemporary informs its readers that "The new Catholic Church of St. Paul of the Cross, at Mountaigres [?], near Dublin, is being hurried on to completion, from the drawings of Mr. J. J. McCarthy, architect. It is in the Romanesque style of architecture, and consists of nave, aisles, and transept. The cost is expected to be over £15,000 before completed. At present the chancel will not be built, owing to want of funds."



## THE SOCIAL SCIENCE CONGRESS.

THE Congress, which opened this year at Aberdeen on the 19th ult., under the presidency of the Earl of Aberdeen, appears to have proceeded agreeably, and ended with satisfaction. A very large number of papers were read in the various departments, and discussions took place upon several of public importance. We have not space to indicate more than an outline.

The president, in the course of his elaborate address (the greater portion of which will be found on another page), dealt with a variety of topics—prison labour; reform of prison discipline; workhouse reform; and, improvement of labourers' dwellings.

On Thursday, the 20th, Lord Gifford, the Scotch judge, addressed the Social Science Congress on the scientific character of jurisprudence, and the necessity for true legislative proceeding according to its immutable principles. The work of the departments was then begun. The Education Question and the subject of Competitive Examination was discussed; the Economy and Trade Department, where the effects of strikes and lock-outs were under notice, and the Health Department, where the provision of suitable dwellings for the working classes was debated, attracted most attention. In the evening the Congress was entertained by the Corporation at a banquet.

On Friday, the 21st, Lord Young delivered an address to the Association as President of the Education Department. He stated the principles and reviewed the operations of the Education Act. Before 1872 Scotland had a national system of education, but it was, he said, necessarily of an ecclesiastical character. He referred to the large number of new schools built or resolved upon, and went on to express an opinion against direct supervision or control of local managers by a central authority. In the departments the principal questions under discussion were—in Law, to what extent it is expedient to control by legislative enactment contracts between landlord and tenant; in Education, the best means of securing a high standard of education; in Repression of Crime, the best kind of labour for prisons; in Public Health, the sanitary condition of our fishing population; and in Art, whether art competitions are favourable to art progress.

On Saturday, the 22nd, the members took a half holiday, but before setting out for Banchari, Aboyne, Balmoral, and Dunatier Castle in excursion parties, they listened to the reading of some important papers. The Lord Advocate of Scotland, as president of the Repression of Crime Section, delivered an address on the subject which engages the attention of his department, and, from his long experience on both sides of the criminal bar, and his official position as Public Prosecutor in Scotland, his opinions were received with a considerable amount of reverence. Besides the provisions which the law makes for the prevention and punishment of crime, his lordship recommended the more general calling into operation of moral agencies, such as education and Christianity, in the promotion of temperance amongst the poor, and, if once they have lapsed into criminals, the exhibition of more brotherly kindness and sympathy in labouring after their reclamation to society.

At Monday's meeting, Mr. Edwin Chadwick, President of the Public Health Department, delivered an excellent lecture on the advance of Sanitary Science, showing the marvellous effect of the better observance of the laws of health, and that the death-rate in old urban localities should not be above 16 or 17, and in the new above 10 in the 1,000 of the population. In the departments, the best papers were: on introducing art into the homes of persons of limited income; preventing fraud on the part of promoters of companies; and remedying irregular attendance at schools. In the evening a meeting of working men was held in the Music Hall, at which the Lord Provost presided, and intro-

duced several of the members of the association, who addressed the meeting. They explained the object of the association, showing that working men are deeply concerned in the questions that come before it, and soliciting their countenance and aid. Mr. Hastings, President of the Council; Mr. Joseph Brown, Q.C., L.D., Aberdeen; and Mr. Chadwick, M.P., also delivered addresses; the latter advocating the establishment, management, and support by working men of co-operative societies.

At Tuesday's meeting, Mr. James Caird, C.B., President of the Economy and Trade Section, addressed the association. He reviewed the causes of the present depression, which, he said, had been greatly aggravated by three bad harvests in succession. The question of our supplies of food was brought under notice, as well as our dependence upon foreign countries in this respect, though this was not accounted an evil; even if from war some of the main supplies were cut off, the contingency might be met within our own boundaries. The land question was next adverted to, and the desirability of procuring in cases of intestacy an equal partition of land like personal property, restriction of settlement to lives, enlargement of powers of sale, subject to settlements, simplification of titles, and easy means of registration. The Trade Department was crowded while Miss Lydia Becker read a paper in advocacy of women's suffrage. The other papers were, in the Repression of Crime Section, on the best modes of preventing infanticide; in Education, on the instruction of workmen in political economy; and, in Public Health, the ventilation of sewers.

On Wednesday, the 26th, the Congress was brought to a close. Mr. Hastings, President of the Council, reviewed the questions with which the council dealt during the past year, mentioning poor-law administration in particular, and urging some reduction of the out-door relief as a means of decreasing pauperism. The tickets sold appear to have been 920—a number not much below what was disposed of at Liverpool, where the population is considerably in excess of Aberdeen. The proceedings have been pronounced by the officials of the association to have been fully equal in interest and importance to those of any previous congress. We may give elsewhere, or in future issues some of the important papers read, and which led to instructive discussions.

## ART AND LABOUR.

At one of the sittings of the Art Department of the Social Science Congress, under the presidency of Lord Ronald Leveson Gower, the special question of discussion was, "Are Art Competitions favourable or unfavourable to Progress."

Mr. J. Forbes Robertson, of the *Art Journal*, read a paper in which he contended that art competitions, properly conducted, and entered on with a spirit by those concerned—a spirit which looked more to the glory of art and one's native country than to any personal aggrandisement, undoubtedly accelerated art progress. It was, he pointed out, a necessity to obtain impartial and educated judges. Art contests should be open and free, and the judges the most cultured men within the city, whether rich or poor. If an expert from afar, whose judgment in things æsthetic had received the approval of public opinion, was within reach, they should not let the circumstance of his being a stranger prove a bar to the acceptance of his services. Above all, they should let the interest of the citizens be enlisted, and while the works of art were on view the press should devote a daily column to the expression of the people's opinion. Then they might rest assured that art competition, so conducted, was beneficial to art progress.

Mr. Ward, R.A., made a few remarks on the paper, giving some amusing incidents of his experience in art competition.

Mr. H. H. Statham read a paper "On the

prevalent Taste for Art Furniture and Bric-a-brac," which he considered was indicative of a sound and healthy æsthetic culture. He said it was almost a commonplace now to urge that art was not confined to sculpture and painting, but should be shown in all the objects collected in a room, and that they should aim at a totality of effect. If that meant that they were to bring furniture and decoration up to the level of fine art there could be nothing said against it, except, perhaps, that it was Utopian; but the theory seemed practically to result in an attempt to bring fine art down to the level of decorative furniture. He considered it a sign of something very unsound in the artistic taste and sentiment of the day. They should be exhorted systematically and on principle to rank the lower and more material forms of art as equal to, or even above, those which appealed to the highest consciousness and perceptions.

Miss Burton, Edinburgh, read a paper on the subject of "Beauty not incompatible with Labour." She started by noticing that where industry had planted itself in this country it had made a blot on the face of nature, and argued that that need not necessarily be the case. In the Hartz Mountains there was a district entirely devoted to mining operations and other industries which, instead of deforming the country, had adorned it. The miner's costume there, too, was picturesque and pleasing to the eye. The same might be said of other workers among our continental neighbours. She thought the secret in this country was that we were ashamed of work, and cared not, while at it, for ourselves or our accessories, whether they were pleasing or not. As an indication of what might be done in combining beauty and labour, she referred to the dress of the Newhaven or Aberdeen fishwife, who was employed in identically the same work with the fish cadger.

## THE LONDON MASONS' STRIKE.

A LARGE number of employers have conceded to the demands of the London masons for 10d. per hour; but the contractors of the new Law Courts refuse to accede to their demands, and succeeded in importing German masons to the number of 24. These foreign masons went to work for the first time on Tuesday, at the new Law Courts, but they were ingeniously spirited away. On Wednesday morning, as the time approached for the reappearance of the men, it was observed that they were all attired in their working clothes, as if ready to repair from their lodgings in Bouverie-street to the site of the new buildings at Temple Bar. This satisfactory appearance of matters completely disarmed all suspicion on the part of Messrs. Bull; but a few minutes after the time for the coming of the German workmen had passed, it was ascertained that, after changing their clothes, they had departed, with their luggage, in two vans, which had been driven over Blackfriars Bridge. Later on, it was believed, that the foreign workmen had been conveyed down to a point on the River Thames whence they embarked homewards. Irish masons and fixers are now sought for.

## GLENGARRIFF, BANTRY BAY, SANATORIUM.

IN last issue of our contemporary the *Builder*, an article appeared respecting this newly-discovered resort for invalids during the winter months, in which the great advantages of its dry and warm climate are pointed out, especially in laryngeal or pectoral disorders. The average is 7° over that of London, and 6° over that of Torquay; but, as regards the foreign and more popular places of resort, the article says:—

"The temperature at Glengarriff during the months of winter and spring is registered at 3½° above that of Montpellier; and is not only higher, but much more equable than that of Nice, which is fitfully visited by the dreadful ravages of the mistrale, the bise, and the sirocco,—the register of



rainfall being recorded as over 5 in. less than even at Nice, or the other refuges for invalids on the south coast. The peculiar warmth and dryness of the air upon the south-west coast of Ireland is owing to the influence of the Gulf Stream, which flows continuously from the Gulf of Mexico, nearly parallel to the American coast, northward, and washes the whole south-western promontory of the Irish coast, from Mizen Head to Dingle Bay, Bantry Bay opening out to the warm tide, and receiving the full tribute of ozone, which it imparts to the grand and picturesque mountain-bound districts, extending over twenty-five miles from the ocean entrance to Glengarriff and its surroundings."

Why should our Irish nobility and gentry, particularly of the invalid kind, be rushing hither and thither to seek for health abroad, with such a healthful resort in their midst, and within a few hours' journey from the capital?

## THE PRESIDENT'S ADDRESS.

SOCIAL SCIENCE CONGRESS.

THE Earl of Aberdare, after some introductory remarks respecting the association and the town in which they were assembled, said:

The present occasion would be, in a very exceptional manner, opportune for a general retrospect of the proceedings of the Association since its formation, because, in entering upon the session which has been this day inaugurated, the Association attains its majority—this being the one-and-twentieth Congress since the first meeting was held at Birmingham, under the presidency of the great scholar, statesman, and orator whose name and influence secured a distinguished position for the society, even in its infancy. But not only do the limits of time at my disposal forbid my entering on such a review; but further, I feel that it may more fitly devolve on some one who has followed the proceedings and fortunes of the society during the last twenty years, and who is, therefore, in that, as well as in other respects, better qualified than I can pretend to be to perform the task. Among the questions to which public and legislative attention is at present directed, and which, therefore, fitly takes a place in your programme, is that of Prison Labour, and I am glad to notice that it is one of the specific questions to be discussed in the section presided over by the Lord Advocate. The matter is one in respect of which I can take no other place than that of a learner; and if I offer a few remarks upon it, it is solely with the view of stimulating, not of anticipating, the discussion of which it will doubtless form the subject. But it seems to me that labour in connection with imprisonment has hitherto been regarded too exclusively as an aggravation of punishment, and therefore as an additional degradation imposed upon the prisoner. It may be this, doubtless, and in many cases it ought to be so. To the ill-conditioned idler who spends his life either in the streets or in the bridewell, all work is irksome; and for certain classes of criminals it is but right that prison labour should be essentially penal. But when prisoners are employed at trades which they have followed before their conviction, or by which they may earn their living after the expiration of their sentence, such labour is in no respect degrading, and in numerous instances it cannot fail to operate as a positive alleviation of the prisoner's lot. Enforced idleness in a bare and solitary cell would be to many a more grievous punishment than enforced labour in any probable circumstances. To administer prison labour in such a way that it will be punitive to the undeserving, and a boon to those who give proof of their desire after reformation—this is one of the problems which claim solution. The difficulty in dealing with it is vastly increased by the fact that not only the prisoner, but his work, is isolated. Gaol labour is entirely separated from kindred labour outside the prison walls, and it is denied a free market for its productions, as at present the prison authorities are compelled in a sense to smuggle their wares into the market, and thus to dispose of them at a serious disadvantage. But it may be reasonably hoped that ere long the public intelligence will thoroughly revolt against the idea that it is in the interest of the community that the inmates of our gaols should be kept at useless toil during their imprisonment, and then turned out upon society unfit for anything, save to thief or beg.

It is probably impossible to make prison labour either remunerative to the community or beneficial to the prisoner in the case of persons committed for the very short terms which form so large a proportion of the sentences on summary conviction recorded in the judicial statistics of every year. But the experience of the working of our convict

establishments, alluded to by Lord Aberdare in 1875 at Brighton, and even of some of our large local gaols, tends to show that no similar difficulty exists in cases where longer sentences are imposed. It is not from legislation that a decided reform need be expected, but rather from the cultivation of a more healthy and intelligent public opinion on the subject. Hence the great value of the aid which this Association can afford in the matter, and the importance of free discussion at meetings like the present. If all restrictions on prison labour were removed, it is possible that many persons might be temporarily prejudiced; but, on the other hand, it must be remembered that it is the interest of the prison authorities to employ prisoners in the manner which is most profitable, and therefore with a free market there would be less tendency than at present to an unfair pressure on any particular trade. If the term of a prisoner's sentence he spent in teaching him a trade which, by reason of its being either overstocked or overweighted by prison labour, will not afford him the means of earning a livelihood on his discharge from gaol, one great object of prison administration has failed. On the other hand, if once the labour of a prisoner be made really profitable to the prison authority, it will probably be profitable to himself when he ceases to be a prisoner, and if any help be needed to secure this end, it may easily be afforded by voluntary societies established outside the prisons, and independent of them, but connected with the same market at which the productions of prison labour are disposed of. An industrious and well-conducted prisoner would then be enabled to secure, immediately on his discharge from custody, employment precisely similar to that which occupied him in the gaol, and thus relieved from the special dangers and difficulties which at present beset the discharged prisoner during the period in which he is seeking employment, he would be enabled ultimately to pass into the ranks of his particular trade.

One of the chief difficulties at present experienced in regard to the employment of prisoners, and even to the maintenance of discipline among them, arises from the fact, already noticed, that the majority of the inmates of our gaols are persons committed on summary conviction for very short terms. Lord Aberdare made a startling statement when he said at Brighton, that in most cases such prisoners "leave prison morally worse than they entered it," and though great improvements in this respect may be hoped for from State control of prisons, his statement remains that, "after all that has been or can be done, imprisonment for comparatively short terms must ever remain an unsatisfactory method of punishment." In describing it as unsatisfactory, I judge from the context, Lord Aberdare intended to express the opinion that imprisonment under such circumstances never can be made reformatory. But it will be admitted that when imprisonment is simply punitive, it fails of its most important function if it be not at the same time deterrent; and that punishment for brief terms does entirely fail in this respect is amply established by the records of our courts and the figures afforded by the annual volumes of judicial statistics. There is no abstract moral connection between offences against human laws and the particular punishments which particular laws have prescribed; and therefore when punishment proves notoriously inadequate either to reform the criminal or to deter from crime, it becomes simply useless, if not worse than useless. That the same individual should be sent to prison for a week or a month, for the tenth, twentieth, fiftieth, or, as sometimes occurs in London, even for the hundredth time, can only serve to bring prisons and the administration of the criminal law into contempt. Surely it would be for the interest, not only of the community, but of the offenders themselves, that the mere fact of a certain number of successive convictions should render the delinquent liable to be arraigned before a higher tribunal, and committed for the maximum term of imprisonment, or even to be sent to penal servitude. When such habitual offenders are reclaimable, they would thus be afforded at least a reasonable chance of reformation; and if they be incorrigible, it is only right that they should thus be practically outlawed. The suggestion here offered deserves neither discredit nor praise on the score of novelty, for it is in fact but an extension of a principle which is as old as the Vagrancy Laws. By thus eliminating from the population of our common gaols the class of *habitues*, now so numerous in large towns, the number of prisoners committed for short terms would be greatly reduced. And if, as seems probable, the power of imprisoning for debt, and of committing in default of paying money penalties is ere long to be further curtailed by legislation, in the sense indicated by the Home Secretary during the session before last, the prison will become more essentially an institution for the punishment and reformation of criminals, and

prison administration will thereby be greatly simplified. It would probably excite the surprise of many even in this audience to be informed that a not inconsiderable section of the inmates of our gaols are charged with no crime, and that not only the regulations in force for the discipline of prisons, but the statutes under which these regulations are framed, carefully distinguish between criminal and non-criminal prisoners. Of the latter class, debtors constitute a considerable proportion; for though the gross anomalies and abuses of the debtors prison are now becoming matters of history, imprisonment for debt practically remains as an English institution. It is true people are no longer imprisoned simply for owing money, but they are committed for not paying it when ordered to do so by a competent tribunal. The theoretical distinction is clear enough, but in many cases the practical effect is the same. A man who refuses or neglects to pay a debt which it is in his power to discharge may justly be sent to prison. But the case is very different when the obligation is created without suspicion of fraud, and when misfortune may have produced a real incapacity to meet it. In such circumstances it is illogical and inconsistent to imprison at all, now that imprisonment for debt has been ostensibly abolished. Whenever, in the other case supposed, the debtor's conduct is essentially fraudulent, and there is no sufficient reason why the severity of imprisonment should for him be so carefully mitigated, I am not unmindful of the practical difficulties which must beset the administration of such laws, no matter how wisely they may be conceived, and how carefully they may be framed; but I venture, nevertheless, to submit that legislative reforms in the sense I have indicated are urgently required. Moreover, while the Legislature ought to be solicitous in the interest of good citizens to afford ready and adequate means of enforcing the obligations contracted in commercial life, the concomitant evil of inducing carelessness in giving credit should likewise be avoided. There is some reason to fear lest, on account of the cheap and expeditious procedure of the county courts in England and the sheriff's courts in this country, many persons are allowed to lapse into the position of creditors, and ultimately to reach the debtors' ward of the common gaol, who would probably escape if credit were not so easily obtained. A reform in the management of our workhouses, similar to that now proceeding in respect of prisons, is probably somewhat remote, for the question is beset with many difficulties, including that of the relative functions of local and imperial taxation. And yet it is to be feared that in the administration of our poor laws abuses exist as great as those which have led to the new prison acts. The idle, and those who are scarcely deserving of pity, are allowed to be a serious burden on the rates, while our poorhouses seem to be, in many respects, conducted on the assumption that such as those alone will claim admittance. The unfortunate who lapse into poverty through no fault of their own are thus repelled, and, as the result, the public sense is occasionally shocked by the record of bitter privations, and even of deaths, incurred to avoid the workhouse. Is it reasonable to hope that some day the masters of our large workhouses will be men of the same calibre as the governors of our best-ordered prisons, and that the constant supervision of visiting committees of magistrates will further ensure due discrimination in the administration of such institutions, not forgetting the sad but certain fact that "the poor shall never cease out of the land," and that there are some whose poverty ought to command unmingled pity, and secure to them compassionate relief? As a single illustration of my meaning I may mention the enforced separation of married paupers. Such a requirement, for instance, though generally necessary for the maintenance of order and discipline, might surely be dispensed with at all events in the case of the aged and infirm. To sum up the matter in a word, while for the many the workhouse properly partakes the character of a reformatory, there are those for whom it ought rather to be regarded as an asylum.

There is another subject, somewhat akin to this, to which I wish here to make brief but special reference—namely, that of increased house accommodation for the labouring classes and for the poor. The recognition of a great want in this respect as regards towns led to the formation years ago of the Metropolitan Association for Improving the Dwellings of the Working Classes. This society, founded by several enlightened men, from purely philanthropic motives, has accomplished much useful work, and continues to-day in a flourishing condition; while it has been the pioneer, if not the agent, in promoting a number of schemes having ostensibly the same object. The general recognition of the need of further steps in the same direction, which led so many to co-operate in this move-



ment, took shape as regards legislation in the Labourers' Act of 1875. This act, while it endorses and adopts much that has been attempted by private or voluntary effort, gives increased scope and facility for similar exertion in the future, and at the same time it provides safeguards against their failure or miscarriage.

Turning to another aspect of the same subject—namely, the want of improved dwellings in rural districts—we find that in this department also the need has been to some extent recognised by the Legislature; for the loans administered under the management of the Inland Enclosures Commission have special reference to the building of cottages, as well as to other agricultural improvements. But in speaking of the recognition of a need in this respect, whether in urban or rural districts, we are reminded somewhat sadly that such recognition has not availed to lead to an energetic and comprehensive effort to provide a remedy. In this particular district the need of improved cottages accommodation exists probably to as great an extent as in any other part of the kingdom, and it has accordingly been the subject of a good deal of attention and of much discussion. But it seems clear that before any extensive improvement can be effected there must be more co-operation between all the parties concerned. The landlord, the tenant-farmer, and the labourer must all contribute. It is not enough for a landlord to make up his mind that he will not look for a mere money return from expenditure incurred in the building of farm cottages. The farmer must rise to take an interest, in some measure at least, in the moral and physical well-being of his men, and surely the responsibility accruing from the position of a master applies here as well as in other cases. While, lastly, the farm labourer must recognise the advantages offered by an opportunity of forming a settled home in contrast with the roving and independent life which in this country is unfortunately too characteristic of that class.

## SANITARY MATTERS.

### NORTHERN DIVISION.

Mr. Henry S. Rogers was summoned by the Public Health Committee to answer for a nuisance existing in the rear of his houses, 2 and 3 Upper Gardiner-street caused by two outhouses, close to the dwelling-houses.

Mr. MacSheehy, Law-agent to the Corporation; Mr. Boyle, secretary to the Public Health Committee; Dr. Mapother, Consulting Sanitary Officer,\* and other members of the Corporation Sanitary Staff were present.

Mr. MacSheehy said there was a peculiarity in the case, as on the 15th inst., Mrs. Rogers was summoned on a similar complaint, under the belief that she had a separate estate. A point was made that she was a married woman, and the summons was dismissed. The husband was now summoned.

His Worship said he supposed there was now no answer to the charge.

Sergeant 2 C proved that a nuisance existed on the premises, and he thought it could be abated in seven days.

His Worship was about making the seven days' order, when

Mrs. Rogers appeared in court, and stated that her husband was in his office, and unable to attend.

His Worship—And he sends you to transact this delicate business!

Mrs. Rogers—He told me to hand you this letter.

His Worship read the certificate, which was signed by Dr. J. E. Kenny, and stated "That no nuisance dangerous to health existed now in either of the said houses."

Mr. MacSheehy—This is a peculiar case, because Dr. Kenny happens to be one of the inspectors of the Public Health Committee, and he had favoured the committee with a letter to a somewhat similar effect. The Public Health Committee was astonished at this, and I will show a report from the inspector of the district, Dr. Ferguson. Dr. Kenny went outside of his district.

His Worship remarked that Dr. Ferguson's report was two days later than Dr. Kenny's.

Dr. Ferguson, Sanitary Officer of the district, said he had examined the premises on Friday. Decidedly the nuisance was injurious to health.

Mrs. Rogers—Dr. Kenny, when he saw the premises, was so astonished at the prosecution that he said he could not believe it!

Dr. Mapother, Consulting Sanitary Officer, said he had been three or four times to the place.

His Worship said he could only make a preliminary order, and then if Mr. Rogers did not abate

the nuisance at the end of seven days he would hear Dr. Mapother's evidence. That would be the real tug of war as to whether a penalty should be inflicted or not.

Mrs. Rogers said she wished his worship would see the place.

His Worship—Indeed I had much rather not!

An order to abate the nuisance was made.

What a burlesque, surely!

At their meeting on Friday the Public Health Committee passed a unanimous vote of confidence in the judgment and ability of their officers, and also gave directions that the most energetic measures should be carried into effect with a view to the prompt abatement of the offensive and dangerous nuisance referred to.

## HOME AND FOREIGN NOTES.

**DEATH OF A SCULPTOR.**—The death of Mr. Meredydd Thomas, the eminent Welsh sculptor, took place a few days ago.

The principal part of the Patent Office buildings in Washington, one of the finest edifices in the States, has been destroyed by fire. Between fifty and seventy-five thousand models, including those of some of the most important inventions extant, were burned. The damage is estimated at 500,000 dollars.

**GLENRAVEL IRON ORE MINES.**—These mines, situate at Glenravel, County Antrim, were sold by auction, at Furness Abbey Hotel, on the 11th ult., by order of the representatives of the late Mr. James Fisher. The biddings commenced at £5,000, and after a spirited competition the hammer fell at £21,000.

The foundation stone of a new church for the parish of Moylescar, within three miles of the town of Mullingar, has been laid. Not only has the site been given by Mrs. Tottenham, of Tudenham Park, but that lady has undertaken to bear the cost of the structure, which will be about £7,000. The names of the architect and builder have not been communicated to us.

At a meeting of the Greenock joiners, held on Tuesday evening, it was agreed by a small majority that the demand made a week or two ago for an increase of 3d. per hour on the old rate should be withdrawn, the men being unwilling that the demand should in any way hinder a settlement of the present lock-out. The result of Tuesday night's decision is that a number of the men have resumed work.

**BRIDGING THE BOSPHORUS.**—Captain James E. Eade, an American engineer, in conjunction with Mr. A. O. Lambert, has completed plans for a bridge across the Bosphorus, connecting Pera, European Constantinople, with the Asiatic shore. The bridge, which, with the exception of the masonry and flooring will be constructed of iron, will be 100 ft. wide, 6,000 ft. long, and will consist of 15 spans, of which the central one will cover 750 ft., the longest span in the world.

**THE LONDON ROMAN WALL.**—A piece of the old Roman wall has been removed during the past few days, whilst workmen have been pulling down a house in London-wall, near the corner of Cripplegate-buildings. Close by the site of the premises referred to lies the small but carefully-tended closed burial ground of St. Alphage, at the back of which a part of the old Roman wall still exists, and is visible to every passer by, though it is mostly overgrown with ivy.

**ALLEGED LIBEL.**—In the Northern Divisional Police Court on Wednesday, before Mr. C. J. O'Donel, Mr. Philip Keogh, instructed by Mr. William Robinson, applied on behalf of Mr. P. J. Fogarty, proprietor of the *Irish Trades' Journal*, that a summons be issued against Mr. William Hastings, proprietor of the *Irish Artisan*, to show cause why information should not be granted against him for printing and publishing in his journal, on the 15th of September, 1877, as alleged, a certain false, scandalous, and malicious libel contained in an article headed "The Queer Estate Company—Give them Rope," against the plaintiff. The application was granted, and the case will be heard to-morrow.

**MORE SLANDER.**—A "daily journal" has been informed, on *unimpeachable authority*, that on a recent Sunday, in a country chapel yard, a public auction of timber and slates took place in presence of the clergymen!! What a precious *canard*! Whole columns of letters may be looked for in its forthcoming issues.

The Artisans and Labourers' Dwellings Committee met in the City Hall on the 14th ult. Several reports and letters were read and considered; it was resolved to seek permission from the council to put the Local Government Board Provisional Order Artisans and Labourers' Dwellings Confirmation Act, 1877, into force in this city. The Select Committee who had charge of the Improvement Bill of last session met on same day in the City Hall. A list of the liabilities incurred in the attempt to promote the bill was considered, and a report from the committee to the council adopted, by which it was recommended that the opinion of counsel be taken in reference to the legality of the payment of the several accounts submitted.

Lord Sandon, whilst presiding at a meeting at Burslem, for the distribution of prizes to the successful students of schools of Science and Art, said he did not believe in too much Government interference except in matters of national importance. He dwelt on the necessity of encouraging the youth of the industrial classes to indulge in scientific and artistic pursuits, as they would not only promote the commercial prosperity of the country, but would make the homes of the masses purer and happier. The effect of this would be felt over the whole of this vast empire, where was set the fashion in habits of thought.

**SUBURBAN IMPROVEMENTS.**—On every side of the city the fact is made plain that Dublin is extending itself into the country. This is well illustrated in the neighbourhood of Drumcondra, where long lines of terraced and detached houses have sprung up within two years on the ground belonging to the Dublin Land and Building Company—an association which has practically illustrated how social comfort and economy can be combined with the most profitable returns on invested capital. It is most gratifying to be able to observe in the Drumcondra district true and legitimate progress in the right direction. The houses which have been built by the company or by their tenants are, without exception, remarkable for their neatness and fitness for residences for the respectable middle classes of society. House-building, no matter how excellent and numerous the residences may be, is not by any means to be desired if not attended by wise sanitary provision for the health and domestic convenience of the occupiers. The company have shown an excellent example to all who are going to build, by constructing a thorough system of sewerage [sewerage] on the newest and improved principles. They have also succeeded in supplying the entire district with Vartry water, and bringing it to all the houses erected on their ground. The rapid increase of the population of the district rendered it necessary that a line of tram cars should run between Drumcondra and the city. This line was opened about a fortnight since, and the daily-increasing traffic shows the wisdom of the promoters of the project. —Saunders.

**TEMPLE BAR.**—The contractors for building the new law courts in the Strand cannot, I should say, be accused of sluggishness in the performance of their task; and Mr. Street's colossal pile seems to be rising with the rapidity of Aladdin's palace. But just as the Law Courts grow grander and more imposing to the view, so does poor little old Temple Bar, close by, seem to assume every day a more shrunken, dilapidated, and woebegone appearance. The dejected structure has long since been doomed to destruction by public opinion, and more recently the sentence has been confirmed by a vote of the Court of Common Council; but still do the "proper authorities"—whoever they may be—persist in not pulling the tottering Bar down. I even believe there is an influential party in the city who not only resent the removal of the shambling structure, but cherish hopes that it may be permitted for many a long year to obstruct the traffic between the east and the west of the metropolis. It is a sad pity, of course, to have to raze to the ground an edifice which was designed by Sir Christopher Wren; but I would respectfully point out that more than a hundred years ago we were fain to pull down a much more beautiful Bar—the splendid Tudor gate, which spanned King-street, Westminster, and which was designed (so tradition declares) by Hans Holbein. The apartments over that gate were, at the beginning of the eighteenth century, in the occupation of Laurence Hyde, Earl of Rochester; and there Mrs. Delany (Swift's Mrs. Delany, Queen Charlotte's Mrs. Delany, Lady Llanover's Mrs. Delany) spent a part of her girlhood. I am sorry for Holbein's gate. I am not sorry for Temple Bar. I shall throw my cap up when the Bar is pulled down; and, proceeding to the Cock Tavern, I shall bid the plump head waiter fetch me a pint of port, wherein I shall drink oblivion to an ugly old monument which awakens only the gloomiest of historical memories.—G. A. S., in the *Illustrated London News*.

\* A contemporary explains this title thus:—"Anglice, principal medical officer!"



**EXCAVATIONS AT NINEVEH.**—The Porte has granted a firman for the continuation of the excavations at Nineveh, and for the recovery of the remainder of the library of Assurbanipal at Koujunjik. Hormuzd Rassâm is already on his way to Mosul.

**TRADES UNION CONGRESS.**—The congress, after sitting a week and discussing various subjects of interest to working men and others, closed its proceedings on Saturday, the 22nd ult. Resolutions were adopted in favour of direct working-class representatives, assimilation of the county and borough franchise, and distribution of seats, against the unfair competition of reformatories in the labour market, and of sympathy with the locked-out operatives of Bolton. Bristol was selected as the place of next year's congress, though a vigorous effort seems to have been made by the Scotch members to have it held at Edinburgh.

**CAVE DWELLINGS.**—Excavations into Mount Caburn, near Lewes, by permission of the Right Hon. the Speaker, the owner, have just been made by Colonel A. Lane Fox, on behalf of the combined committees of the British Association and Anthropological Institute. The discoveries made were of an interesting character. Seven pits were opened in the interior of the camp, of a square, oval, and round shape, of different sizes, and between 6 ft. and 7 ft. deep. They were evidently human habitations, and would only contain two persons crouched together, there not being room for them to lie extended. They were found to contain the bones of the ox, pig, horse, calf, and kid, showing that domesticated animals were used. The remains have been sent to Professor Rolleston, of Oxford, for identification. The filling in of the pits appeared to be of the late Celtic period; but whether the pits themselves are of the same age it is difficult to determine.

**HEALTH OF DUBLIN.**—The deaths registered in the Dublin Registration District during the week ending 22nd September, 1877, represent an annual mortality of 19.5 in every 1,000 of the population, by the Census of 1871; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 18.5 per 1,000. In London the death-rate was 17.4 in every 1,000 of the estimated population; in Glasgow 19.3, and in Edinburgh 19.7. The number of deaths zymotic diseases registered during the week is 34, being 3.4 under the average number in the corresponding week of the last ten years. Forty-four of the persons whose deaths were registered during the week were under 5 years of age (19 being infants under 1 year old); and 16 were aged 60 and upwards, including 7 persons aged 70 and upwards, of whom 1 was an octogenarian. Thirty-two of the deaths registered occurred in hospitals and other public institutions; of this number 10 took place in the North Dublin, and 7 in the South Dublin Union Workhouse.

**THE FARNESE PALACE FRESCOES.**—A correspondent states that the Farnese Palace, so well known to all visitors to Rome for the story of Cupid and Psyche as told in fresco by Raphael and his disciples, is in danger of collapse, owing to the works going on for the improvement of the channel of the Tiber. The commission appointed immediately after the great flood of 1870 to devise means of preventing the recurrence of similar disasters, has suggested the widening of the bed of the river by cutting off corners wherever practicable, and giving the stream a freer run. The Farnesina garden, as forming a curve in the river, besides being open ground, was pitched upon at once to be removed. The Duke of Ripalta, to whom the property belongs, applied to the Academy of St. Luke, the great authority on all at questions. The gist of the report agreed to by the academy is that after careful examination of the palace walls and the soil on which they stand, the deputation believe that the digging of foundations for the river wall will, by producing strong under-currents, cause the water to wash under, or, at least, filter through to the foundations of the palace, and that the walls would then sink or crack and the fresco drop off; that, unless the greatest care and attention are bestowed on the work, the paintings would be not only damaged, but irretrievably ruined, and that such care is not now taken.

**THE BRUCE MONUMENT AT STIRLING.**—Operations were commenced last week in view of the erection of the monument to King Robert the Bruce at Stirling, the sculptor, Mr. Currie, being present to see the site marked off. The proposal for such a memorial of the hero of Bannockburn originated in London five years ago, and the site first suggested was at the Borestone, on the famous battle-field, but it was found impossible to arrange with the proprietor of the ground, and it was then determined to erect the monument on the Esplanade of Stirling Castle. In 1872 the Secretary of

State for War granted the necessary permission, and the committee selected the design of Mr. A. Currie, Darnick, near Melrose, for the monument. The idea of a statue in bronze was at first entertained, but was afterwards abandoned, and Mr. Currie was entrusted with the execution of his own design in freestone, and the figure is now completed. The figure of Bruce is nearly 11 ft. in height, and represents the warrior in the act of sheathing his sword after the battle of Bannockburn, the action being meant to signify that the independence of Scotland having been secured by the crushing defeat of the English, the sword might with safety be returned to its scabbard. Of course the figure is completely armed, and the sculptor has taken the utmost care to reproduce the armour of the period, his success in every detail being really wonderful, judging from an admirable photograph of the statue taken by Mr. Cotesworth, of Cowdenknowes. The face has, we understand, been modelled on the features of a descendant of the Bruces, and it presents a noble countenance with the expression of devout thankfulness, skillfully blended with that of conscious dignity. The statue, which has been cut out of a block weighing 7 tons, will be conveyed from Darnick by waggon along the turnpike road, in order to lessen the risk of breakage. It is expected that the ceremony of inaugurating the monument will take place about the middle of this month.

## TO CORRESPONDENTS.

**"DIRTY DUBLIN" JOURNALISM.**—"A Kingstown Ratepayer" is thanked for his suggestion; but we are not inclined to bandy compliments with unprincipled reporters or sub-editors on certain of our morning journals. If the proprietors or conductors of the journals in question are content to prostitute their columns for sensational purposes, or in the interest of a clique, they are welcome to do so as far as we are concerned. In columns where quackery and obsequy have for years found a prominent place, mendacity is in good company.

**RE NOTES ON PRINTING, &c.**—In one of the works mentioned in our last issue as printed by Jackson, in Meath-street—"The Elements of Euclid, &c. The Tenth Edition. By William Jackson,"—should read "William Whiston, M.A." The series of articles being written *currente calamo*, some slight errors have unavoidably occurred.

**CORRESPONDENCE.**—We are obliged to cancel some correspondence, the subject of which has been anticipated elsewhere, and in other cases the questions are of not sufficient importance to warrant their insertion, to the exclusion of more useful matter.

**RECEIVED.**—A Surveyor—A Mason—J. W. C.—An Actor (thanks)—An Old Bookseller (ditto)—B. A.—"An Artisan's Dwellings Tenant"—H. P.—R. W., &c.

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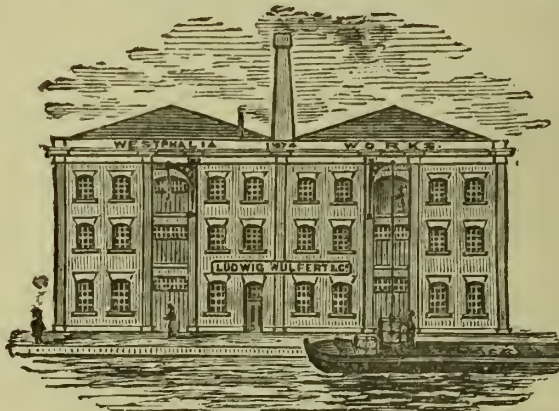
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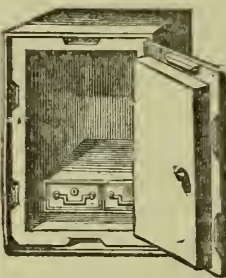
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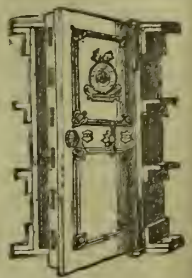
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THE IRISH BUILDER.

VOL. XIX.—No. 428.

MENTAL, MANUAL, AND MACHINE LABOUR.



WE do not purpose at present entering into a lengthened discussion on the subjects of our heading, but to touch upon a few points in connection therewith, for the world of labour in every field is in a very unsettled state, and great changes are impending.

All honest labour is honourable, and all labour may be dignified, though the worker may be obliged to soil his face and hands at some forms of it, and wear rough-spun clothes. Apart from a pure literary profession as a means of living, mental labour is still inseparable from manual labour, and there is no form of the latter of a regular kind but needs the exercise of the mind. As practised at present, branches of skilled labour require the most thought or study, and perhaps mere field or agricultural labour the least.

During our own time working-class organisations have rapidly sprung into existence, and widely extended themselves at home and abroad. Combinations, even for perfectly lawful purposes, were often rigorously put down by the law, and even skilled workmen were not allowed to think openly what was best for their welfare or elevation. Think, indeed, they might; but to give expression to their thoughts, and to embody them in action, was a movement not to be tolerated by the government of the day. Times have greatly changed, for workmen now may think and talk and act, and, while holding themselves amenable to the statute law, they may pass as many bye-laws or trade laws as they like, to regulate the working of their own trade societies. It is no longer criminal to combine in one's own interest, although it is unlawful to coerce another person, be that person a master, an outside employer, or a fellow workman. A large number of the

disabilities that workmen laboured under a half or even a quarter of a century since have been swept away by the growth of public opinion, the spread of education, and the action of the legislature. Some disabilities, of course, still exist, which time will wipe out, and for which public opinion is ripening the opportunity.

Workmen's wages have in a manner gone up cent by cent, but so, it must be allowed in many ways, has the cost of living. High or very high wages is not an unmixed good, but, on the whole, it is better to see the cost of skilled labour going up than coming down, so long as there are not any violent or forced efforts made on the part of workmen, and not warranted by their position.

Competition at home and abroad in any particular direction was a matter little to be feared in the early part of this century, but the introduction of steam and machinery has placed distant countries on an almost equal footing, and employers of labour as well as workmen are now brought to face with a growing danger to their home interests—that of being undersold in their own markets. True, an international federation of workmen or workmen's societies might avert a portion of the danger on the side of the workmen; but the outside public can only be controlled to a very limited extent. If workmen cannot be imported, prepared work and materials can, and there will always be such wide differences between the cost of the raw materials, labour, and living in foreign nations, compared with that in the limited area of the British Islands, that a large margin of profits will exist for capitalists and speculators underselling in the labour markets of Great Britain.

We are now speaking with no party bias, for our sympathies have always been with the cause of skilled labour and our workmen, when their claims are just. Year by year our workmen are becoming more qualified to think and act for themselves, but in thinking and acting they should be agreed to act for the common good betimes in concert with their employers, for no interest in the world of labour stands alone. Some years ago the lines of our own Goldsmith were accepted as an axiom not to be controverted—

"For just experience tells, in every soil,  
That those that think must govern those that tell."

Though still true in one sense, these lines no longer hold good in their set application to the case of workmen. The thinkers, generally speaking, govern the large mass of toilers; for experience, knowledge, study, or thought is necessary to the organisation and execution of labour in large marts, workshops, factories, and mines. Admitting this, however, it must be conceded on the other hand that educated and skilled workmen are the best judges of their own wants, know their own grievances best, and, though they may be mistaken betimes like other people, they are aware of the nature of the changes or reforms that are likely to lead to redress. We have now in England and for some years back have had annual trade congresses, which are conducted with considerable tact and ability by workmen themselves, and several excellent papers on various subjects of interest to workmen and the general community have been read at these annual gatherings. Some public men of note have not disdained to attend some of these meetings, and in a frank and friendly manner volunteer their counsel and practical aid. Why should not large

employers of labour do likewise, so that an exchange of thoughts might lead to the rubbing away of sharp angles and to a better feeling?

Workmen in the sister kingdom have ambitioned to represent labour in Parliament, and to some small extent they have already succeeded, and most likely will, after some time, be more successful. If a few educated representative workmen enter Parliament, and are received with respect there, we cannot see how any objection can be raised to allowing workmen to argue the questions that interest them, face to face with their employers, at any public conference or congress held in the interests of the employers themselves. Men must agree to differ, and, in differing, dissent with respect. Hard-and-fast lines may be drawn on the part of either side, but common sense will soon show that they can never be long maintained. Labour disputes will perhaps be always cropping up in one form or another, but lasting settlements can never be effected through the medium of "strikes" or "lock-outs." At best these are clumsy weapons, and can only be used at a great risk, enormous sacrifice of time and money, of much suffering on the part of workmen and their families, and often bankruptcy and ruin on the side of employers. The funds of workmen should be husbanded, not for "strike" purposes, but for friendly and benevolent purposes in their own interest, for pensions to old decayed workmen, who were good paying members in their time, for purposes of insurance, technical education, for the building of proper trade halls, for places of meeting, and for times of great dearth of employment. We might point out various pressing purposes for which available funds could be judiciously expended with profit and credit to trade societies.

We will not stop to discuss the question whether trades unions, and the disputes of workmen with employers led sooner to the first introduction of labour-saving machines, or whether the occasional strikes which now take place are leading to the more general and constant introduction of machinery and labour-saving machines in all branches of trade. Perhaps combinations and strikes among workmen had in some instances a part, and in other special instances a considerable part, in the introduction of labour-saving machines, but trade disputes were not the sole cause. The spread of education and science through cheap literature, and the establishment of many scientific bodies and humbler institutes, placed knowledge within the reach of all earnest workers, and the inventive faculties of men of all grades received a fresh impulse. This century has certainly been an inventive one since its second decade, and, with steam navigation and railway locomotives, inventions have grown apace, and machinery in all forms increased.

Forty-five years ago the late Charles Babbage published a then remarkable work, and still a most interesting and suggestive one, entitled "Economy of Machinery and Manufactures." In this work he dealt with the questions of labour in its different phases, trade disputes, hand labour, machine labour, and a variety of kindred subjects. We might give many pertinent extracts from this book which would be fully in place at the present time, notwithstanding the great changes that have taken place in most branches of trade and manufactures. Speaking of the proper



circumstances for the application of machinery, Babbage wrote in 1832 (almost the infancy of regular labour-saving machines) the following words:—

"One of the most common effects of the introduction of machinery into manufactures is to drive out of employment much of the hand labour which was previously used. This, for a time, produces considerable suffering amongst the working classes; and it is of great importance for their happiness that they should be aware of its effects, and that they should be enabled to foresee them at an early period, in order to diminish, as much as possible, their injurious results. It is almost the invariable consequence of such improvements ultimately to cause a great demand for labour; and often the new labour requires a higher degree of skill than the old; but, unfortunately, the class of persons who have been driven out of the old employment are not always qualified for the new one; and in all cases a considerable time elapses before the whole of their labour is wanted. One very important inquiry which this subject presents is the question—*Whether it is for the interest of the working classes, that any improved machinery should be so perfect as to defy the competition of hand labour, and that they should at once be driven out of the trade by it; or whether it is more advantageous for them to be gradually forced to quit the trade by the slow and successive advances of the machine?* The suffering which arises from a quick transition is undoubtedly more intense, but it is also much less permanent than that which results from the slower process. If the competition is perceived at once to be perfectly hopeless, the workman will at once set himself to learn a new department of his art. The use of power-looms is an instance of a slow change, which has gradually been diminishing the wages of the hand weavers, &c."

The decrease of hand-loom weavers has gone on at a rapid pace during the last forty years, and in some branches of the weaving trade the hand-loom weaver is almost extinct, the steam-power loom having taken his place.

For long years after machinery was introduced into the weaving trade and other trades, the building trade and its kindred branches were undisturbed; but the inevitable change came at last! The sawyer was one of the first, if not the very first, whose trade was invaded, and his calling as a pit sawyer has for several years been almost wiped out by the application of water-power and steam-power machinery to his trade. Bricks were soon after made by machinery, and then the astonished carpenter and joiner had to look upon mortising, tenoning, moulding, and general planing machines. What he looked upon for some time with feelings of terror or dismay has, however, proved a blessing to him, for his heavy and exhaustive labour in several branches has been lessened, and his wages have not decreased. There are more carpenters and joiners now, more employers, and, of course, more work. Every branch of the building trade is being invaded, and the masons as well as the carpenters, joiners, bricklayers, plasterers, &c., will shortly have to contend with stone-working and dressing machines of an important kind.

In the present transition state of skilled trade, we cannot blame building or other workmen for seriously studying their interests, and obtaining as much as they can for their daily labour. Employers, it must be admitted, desire to lessen the cost of production and increase their profits; and so long as a fair day's work by hand labour or in connection with machinery is performed by workmen for a fair day's wages, employers can have no cause for grumbling. If it can be proved by workmen that, while the employer's profits are increasing, his workmen's position is growing no better, and by the rise in the cost of living it is in fact growing worse, then in that case the workmen have a fair claim for an advance in their wages.

The subject we are discussing is a wide one, and we cannot now discuss it in all its bearings; but one thing is clear to us that mental, manual, and machine labour in the coming future must be bonded and united together for the common interest. There is a germ of great good, if properly developed and applied, in the co-operative principle of labour and dealing in the interest of working men. Let working men study this outlet well, and go to work earnestly, and we promise them that the outcome for the future of their class will be a prosperous one. Man's handiwork in the past, in the realm of machinery, has too often laughed back upon man its maker in derision,—at least it has been looked upon by workmen as if it did. Let our working classes and our intelligent workmen wisely accept machinery, and cultivate a closer acquaintance with it by utilising it, and they will find that what saves the labour of others will save their own manual labour, when worked in the interest of their classes, and that the profits that help to enrich one or a few, will be turned to the advantage of true working men, who are not too proud to work, too ignorant to think, or too irrational to blame others for doing that which all men by a combined effort can do for themselves.

In all we have written we desired to preach the honesty and dignity of labour, to elevate it, and to show that the possessors of a skilled craft have a respectable calling, and cannot only help to build up a better work-a-day world in the future, but stand forth in numbers, by industry and sobriety, as the architects of their own fortunes, and as gentlemen as well as craftsmen.

#### NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

##### EIGHTH PART.

LITERARY activity in Ireland between 1770 and 1780 became more marked, and the issue of books and pamphlets and other kinds of publications more frequent. Many of the works printed were only reprints, while those written by Irish authors were mostly published by subscription. During the last two decades of the last century—comprising the period of the existence of the Irish Parliament—printing and publishing in Dublin received a great impetus, and newspapers, magazines, pamphlets, and works by native authors became more numerous; and several of those volumes were, and still remain, excellent specimens of the typographic art; the paper and binding of these Dublin printed volumes were also good. At the present hour, in the second-hand book trade in London, the Dublin reprints, or Dublin editions of popular authors of the last century, are anxiously enquired after, meet with a ready sale, and bring a good price.

Before resuming and proceeding with our subject by furnishing some notes respecting a few of the volumes and other publications of the time at which we have now arrived, we will make a digression, not apart from, but kindred to, our subject, for the purpose of showing the condition of literary property in Ireland towards the close of the eighteenth century—a state that continued to exist for long years in this century, and which in some of its phases still exists, to the injury of authors and others. The evil was foreseen and complained of a century since, but no redress came. In the last century the Irish people as a class were not a reading public, for journalistic and periodical literature did not reach the hands of the masses. The annual almanack, with a chance newspaper and journal, had to suffice for the amuse-

ment and instruction of that portion of the industrial classes who could read, in the absence of penny journals and magazines, which did not appear until our own time. Let us suppose we are living during the era of the Irish Parliament, and thoughtfully looking around us and looking back for the purpose of estimating the state and wants of the time in respect to literature and literary property in Ireland. Glancing back, then, from our stand-point, we find that as early as the era of Queen Anne statutes were passed for the protection of literary property; yet in this country, although many of the English statutes were enforced, no regulation existed for affording this country the benefit of the laws passed in respect to literature. The English legislature secured to English authors in literature, designers in painting and engraving, music, &c., the exclusive benefit of their labours at home for the space of fourteen years.

In the last century, at the same period, the American statute went further, securing a similar exclusive privilege to authors and musicians and their assigns for the period of twenty years. There was a summary remedy for the infringement of an author or owner's copyright which was duly registered, which meant the entire destruction of the pirated copy or edition, and a penalty of a certain sum for every sheet found in the possession of the offending party. In Dublin and London in the last century piratical printers and publishers were not a few, and were prone to profit at another's loss when they got the chance. Of course, a London or a Dublin book might be reprinted in America or on the continent, but particularly in the former place, entailing a great loss on the author or the owner of the copyright; and these cheap piratical editions were smuggled into the British Islands. This was often done, and continued to be done to a large extent until quite recently, notwithstanding the acts of the 5th and 6th Vic.

What was the situation of an author or proprietor of a literary work, map, engraving, or music, in Ireland in the days of the Irish Parliament, 1782-1800, and for years subsequently? After the labour of years and perhaps the whole of his life, the unfortunate author or proprietor was at any moment liable to be ruined by the issue of an obscure pirated edition of his work or works. As the law stood, the only protection it afforded him was, that he might commence a suit in chancery for an injunction. For compensation he might bring his action on the case or for money had or received, taking his chance of recovering damages by a verdict of the jury. The risk was so great that it was not worth taking, for even if a verdict was obtained the poor author was not likely to be consoled by a barren victory that ruined him by its cost.

The infringement of copyright was thought to be in some measure prevented in Dublin at the period of which we are writing, by the existence of a body called the United Company of Booksellers, but this was a mere voluntary association of individuals which did not extend beyond the metropolis, nor comprise the whole of the printers and booksellers of Dublin. Such a body afforded no protection whatever to authors who ventured to print and publish on their own account, or to those printers and booksellers who were not members of this voluntary association.

It was objected that the provisions of an act to secure literary property in Ireland at the time could be readily evaded by the printing of pirated editions in England and sending the impressions over, or by prefixing London title-pages to Irish piracies. This objection was met with the answer that we should adopt the policy of England. Irish editions of books published in England were subject to forfeiture on importation into that country; and it was said why should not a similar restraint be put on the importation of English editions of works originally published in Ireland. Another objection was put forward at the period of which we speak—that a great part of the employment of



printers in this country consisted in bringing out cheap editions of works originally printed in England, which not only circulated through Ireland, but became an article of export to America; and that, were an act to secure literary property and a registry of copyright introduced here, English booksellers would avail themselves of the registry to stop a branch of business which cut off the market of Ireland in a great measure from English printed books. It was suggested at the time that this inconvenience might have been easily obviated by restricting the right of protecting literary property by a registry of natives of Ireland, or persons who should have been at least one year resident in Ireland, it being considered by some a great object to put "the literary, the musical, and the graphic author" on as good a footing in this country as they were in England, in the belief that our Irish printers might have in that case some better employment than mere re-publication of English works.

The above views which we have summarised were urged upon the attention of the Irish public and the native Parliament; and a local writer, in advocating them, thus expresses his opinion:—

"I am convinced that many gentlemen who deservedly fill stations of trust and dignity in the long robe of this country, have such a sincere regard for the cause of literature [query litigation], and for the honour of their native land, that were such a matter introduced in Parliament, it would experience their most decided and zealous support. To these gentlemen I would address myself and conjure them, as they value the interest of learning, and the reputation of their country, to bestow some share of their attention on this important subject."

Before leaving the subject of copyright as it existed and as it now exists, we may note here that it is now mainly regulated by the 5th and 6th Vic., which provides that the copyright of every book (under which word is included, in the construction of the act, every volume, pamphlet, sheet of letterpress, sheet of music, map, chart, or plan separately published) which shall be published in the lifetime of its author, shall endure for his natural life and for seven years longer, or if the seven years should expire before the end of forty-two years from the first publication, shall endure for such period of forty-two years, and that when the work shall be posthumous the copyright shall endure for forty-two years from the first publication, and shall belong to the proprietor of the author's manuscript. Should a work be pirated or unlawfully printed within the British dominions, an action for damages must be brought within twelve calendar months; and, if unlawfully printed in any place outside the British dominions and imported into the United Kingdom, it may be seized and forfeited by any officer of the Customs or Excise, and the offenders are liable to penalties. There are several later acts of the present reign bearing upon the question of copyright in other matters beside books—models, casts, ornaments, works of art, dramas, inventions, &c., and there is an International Copyright Act in the same interest. The question of copyright is, after all, still in an unsatisfactory state; and American publishers and printers and proprietors of magazines pirate a number of British and Irish productions, to the great loss of British authors and their publishers.

In an Irish periodical of the last century, and often quoted in these pages, we find the following remarks on the subject of the then current "Irish Literature." The observations were to a large extent true:—

"Were the abilities of the Irish to be estimated by their literary productions, they would scarcely rank higher than those nations who had just emerged from barbarism and incivility. Notwithstanding this unfavourable appearance, letters are almost universally cultivated in this isle, and the presses groan beneath the weight of voluminous and expensive publications. But these are not the works of native writers. Various causes stop the growth of authorship in Ireland. 1. The law has not given security to the possession or transfer of literary property.

This must ever damp the vigour of mental exertions' We are happy to hear a remedy is providing for this evil, by men of distinguished abilities, learning, and patriotism. 2. Men of letters receive no patronage from the great in this island. This is a dishonour to them, not to those who stand in need of their countenance and protection. If learning, as Ovid remarks—*emollit mores sinit esse ferus*—softens the ferocity of rude nature, and polishes our manners, we may easily determine the precise state in which the minds of those great are, who suffer learned merit to pine in obscurity and penury. Alexander looked to letters for immortality, and not to his victories. The passage in the *Arctia* poet of Cicero deserves notice:—'*Alexander, cum in Sigao ad Achillis tumulum adstitisset, O fortunate, inquit, adolescens, qui tuæ virtutis Homerum præconem inveneris.—Et verè, nam nisi Ilias extitisset, idem tumulus qui corpus ejus contexerat, nomen etiam obruisset.*' 3. The Fellows of our University, from whom much is expected, have not that—*otium cum dignitate*—which they so highly merit. Confined for many years to a small pittance which we hope to see enlarged from the ample revenues of the foundation: or engaged in the instruction of youth and collegiate duties, they have neither the means nor the opportunities of rendering themselves eminent in the walks of literature. When they arrive to the rank of Seniors they are so far advanced in life, that their habits are formed, and compositions of great extent or importance cannot be expected from them. Not one publication worth notice has appeared this month [April, 1793], yet the literary genius of Ireland is still alive, its scintillations are visible in the *Anthologia*, which has hitherto, and continues still to be honoured by the productions of men of taste and erudition. The originality of its materials, and the beauty of its engravings, will be found equal to those of the best magazine in Europe. Nor does the editor desire or expect the favourable and ample patronage he has as yet experienced longer than he is able to promote the cause of literature, virtue, and the arts in Ireland."

The above remarks upon Irish literature were doubtless written by the Rev. Edward Ledwich, who was the chief moving spirit in establishing the magazine in question, and whose pen was busy throughout its pages while the noted magazine existed. Some of the statements made in the above extract might be justly canvassed, for at the time they were published not a few useful and valuable works, not mere reprints, were issued from the Irish Press, and several other literary productions of note in book form and in magazine literature were being issued from the London Press, the authors or writers of which were Irishmen. A book treating upon Irish matters, and written by a native author, does not cease to be Irish literature because it is printed in London. Even if the subject is foreign, the typography and the printing materials, though they may be English, the intellect that produced the literature is Irish. Many of the dramatic authors, magazine writers, poets, journalists, and general authors, of the last century, residing in London were, as many now are, natives of this country, and their productions were necessarily issued through London printers, booksellers, and publishers. As to the question of want of patronage which was deplored in the past, it is a pleasure to know that the literary profession has outlived the necessity of such aid. Literary men of ability do not now stand in need of princely or lordly "countenance and protection" in the form it was once vouchsafed. The days are happily gone by for slavish dedications and lowly prostration, though tuft-hunting is not yet extinct in the land. A book will now make headway on its own merits if it be a good one and supplies a need, and if critics are just, and printers and publishers do their duty by their author. *En passant*, a portion of a sentence in the remarks quoted above, written, as we said, in 1793, reminds us of Byron's well-known lines in "English Bards and Scotch Reviewers," written at Newstead, in 1808. The Irish critic remarked in his time—"the presses groan beneath the weight of voluminous and expensive publications"; but Byron several years subsequently embodied the idea in a poetical form—

"The loaded press beneath her labour groans,  
And printers' devils shake their weary bones."

If there were no dearth of bards or prose writers in 1793, or in 1808, and if the old hand presses groaned beneath their labour, how stands the case now under the lightning action of giant steam. But we must not run ahead of our subject, and anticipate what we are not called upon to describe here.

To resume the question of native printing and publishing. Special wants of a public character gave rise throughout the eighteenth century to a considerable deal of discussion, which found vent not only through the medium of the press but in books and pamphlets. Several professional men, not living or obliged to live by literature as a profession, turned authors betimes to work out their ideas and bring them before the public with a view to their adoption.

The literature of the water supply of Dublin in connection with the Liffey and the Dodder, and the tributaries of the former and latter in connection with the canals is somewhat extensive and interesting. In 1735 Richard Castles, an Irish practising architect of note, though a German by birth, published "An Essay towards Supplying the City of Dublin with Water." Castles was an architect of large practice, and designed several extensive mansions in this city and the provinces for the nobility and gentry, but he is principally known as the architect of Leinster House (Royal Dublin Society), Kildare-street, and the Rotundo Lying-in Hospital, Great Britain-street, founded by Dr. Bartholomew Mosse. Castles also erected the first stone lock in Ireland—that on the Newry Canal. In the same year (1735), Gabriel Stokes, a mathematical instrument maker in Essex-street, published "A Scheme for effectually Supplying every part of the City of Dublin with Pipe-water, without any charge of Water-engines, or any Water-forcers, by a close adherence only to the natural laws of gravitation, and the principles, rules, and experiments of Hydrostatics." Gabriel Stokes was also the author of the "Mathematical Cabinet of Hydrostatical Balance Unlocked, or an easy Key to all its Uses." In 1787 a pamphlet was published in Dublin, entitled "Remarks and Observations on the intention of Turning the Course of the River Dodder in order to show the inexpediency of such a measure," 8vo. This was in reference to a plan for diverting the river from its natural bed into a new channel, which was effected in 1796. In 1804 a pamphlet was published by Joseph Miller, (8vo)—"Observations on the Defects of the Port of Dublin."

Coming down closer to our own time in the present century, the literature of the water supply of the city was treated in several publications. In 1829, Andrew Coffey, a municipal official connected with the pipe-water works for upwards of half a century, published an interesting pamphlet on "The State of the Water-works past and present." In Whitelaw and Walsh's "History of Dublin," 1818, the question of the water-supply of Dublin is to some extent treated. In the "Modern Plan of the City and Environs of Dublin," published in 1810, the "old course of the River Dodder" and the new one to Ringsend are both described, and also in other plans and in Wilson's maps of Dublin of an earlier date. Mr. R. Mallet drew up a report on the Dodder reservoirs, in pursuance of the directions of the Commissioners of Drainage for Ireland, appointed under the act of the 5th and 6th Vic. In 1854 Mr. Parke Neville, C.E., our present Borough Engineer, issued his report under the direction of the Corporation, entitled a "Report on the Capabilities of the River Dodder to afford a Supply of Water for the use of the City of Dublin and the Suburbs." Mr. Neville was much indebted for his information in a historical aspect to his predecessors in office, and to Andrew Coffey aforementioned, and to Whitelaw and Walsh's history, and other local volumes and pamphlets on the subject.

It will not be amiss here, while we are on the subject of the water supply of the city, to state that there are several acts of parlia-



ment bearing upon the rivers mentioned and the water supply of Dublin. Among these are the 6th George I., the 16th George III., 20th George III., 42nd George III., 49th George III., 6th and 7th Vic., and 8th and 9th Vic. In 1860 was issued the "Report of the Commissioners appointed to inquire into the state of the Present Supply of Water to the City of Dublin, the necessity that exists for an Improved Supply, and also as to the best Source from which such Improved Supply could be obtained; together with the Minutes of Evidence and Appendix," folio. A very interesting and valuable collection of tracts dealing with the question of the water supply of Dublin was recently sold at the auction of the library of Dr. Thomas Willis, in this city (November, 1876). An enumeration of several of the tracts and pamphlets, reports, and other publications dealing with this subject, will be found in the interesting pages of the Rev. Beaver H. Blacker's "Brief Sketches of Booterstown and Donnybrook." Other uncollected information will be found scattered in various directions in local histories and magazines.

From the account published by Mr. Nevillo, it is stated that up to the period of 1775 the city was entirely supplied with water from the Dodder, but from that period to the present [1854] the great proportion of the water was derived from the canals. Now this statement was not accurate, for in Dr. Rutt's "Natural History of Dublin," published in 1772, we have it stated:—

"As to the water with which this city is supplied, as I have elsewhere published a minute account of both plain and medicinal springs of this county, and in the present tract given some further hints on the subject, it shall suffice here to observe that we have great numbers of brackish, saline, or laxative springs, and besides these several others of soft water, but we are for the most part supplied from the rivulets issuing from the neighbouring mountains, and partly from the River Liffey, both of which supply a soft water, and the last is well known (being taken up near Island Bridge) to keep well in long voyages, &c."

The remainder of Rutt's remarks are worth reading, as they show the contamination to which the supply was often subjected in his time.

In St. Catherine's Church, Thomas-street, Dublin, there is a tablet to the memory of William Mylne, an engineer, to whom the inhabitants of Dublin were somewhat indebted towards the close of the last century in respect to their water supply. The inscription runs:—

"To the memory of William Mylne, architect and engineer, from Edinburgh, who died, aged 56, March, 1790, and whose remains are laid in the churchyard adjoining. This tablet was placed by his brother, Robert Mylne, of London, to inform posterity of the uncommon zeal, integrity, and skill with which he formed, enlarged, and established on a perfect system the water-works of Dublin."

Robert Mylne, the brother of William Mylne, was the architect of old Blackfriars Bridge, London, replaced in 1869 by the present bridge after existing a century. It was through the interest of Robert Mylne that Thomas Cooley, the architect of the Royal Exchange of Dublin, and other works of this city, and who was Mylne's assistant in London, had his plan selected in preference to Gandon's and other native and English competitors. Robert Mylne powerfully recommended Cooley to the Dublin Committee. He died in Anglesea-street in 1784, in the 44th year of his age, and Gandon continued, improved upon, and completed his work of the Four Courts.

The Liffey and the Dodder and other smaller rivers in Dublin have given rise to a vast deal of discussion in connection with the water supply of the city, and so have the canals since their formation. The River Vartry has excited a good deal of controversy since it has been adopted as a source of the water supply of the city, but the literature of the Vartry has not yet become of historical interest or "racy of the soil."

#### BUTLER'S MODERATOR SHOWER BATH.

If professional medical opinion is of value on the merits of an improvement in the application of the shower bath, and if a practical experience of its effects on the part of those who tested it has resulted in giving complete satisfaction, then Dr. N. J. Butler's invention has supplied a want and conferred a benefit. As far as we have had time to examine the working of the moderator shower-bath, we are of opinion that it is a great improvement on the older method. By a simple contrivance the force and quantity of the water is regulated, so that every constitution can be suited—the invalid, the weak, the aged, the young, or the robust. There need be no shock, as of old, coming down upon the body like a shower of electrical eels, a terror and a torture, instead of a bracing and agreeable bath. The robust, of course, can still enjoy a down-pour in force, but for the strong, timid, or delicate, there can be, with Dr. Butler's, a light, medium, or heavy shower respectively. The expense of the "moderator" is very little over the price of the ordinary bath; and it must be pleasing to the inventor to find that his apparatus is already making such a rapid headway in this country, and that such a number of professional testimonials, not to speak of the general ones, have greeted its introduction and use.

#### THE DUBLIN METROPOLITAN SCHOOL OF ART.

It is worth more than a passing thought that the old Royal Dublin Society's School of Art opened on the first of this month under a new name, consequent on changes and resolutions on the part of the Science and Art Department, which were recently discussed at considerable length in these pages. As far as the art masters and the instruction given in the schools are concerned, there is little or no material change as yet, for art principles are the same, or ought to be the same, everywhere. For several years back the Dublin School of Art in connection with the Royal Dublin Society has been under the efficient superintendence of the same head master, Mr. R. Edwin Lyne, M.R.I.A., &c., and able assistant art masters and mistresses, and there is no reason for doubting that the efficiency of the Metropolitan School of Art will be in any degree lessened. The wiping away of a name, although it may be a mere formal act, often leads to a feeling of regret, and human nature is so constituted that the sentiment will work its way uppermost in the mind, despite of all thoughts to the contrary. There is a something, after all, in the old associations and historic memories of long standing, of early struggles, brightening hopes, and native triumphs in connection with great artists whose first successes were achieved in schools in our midst. The forms they sat upon, the halls they walked, the chairs they filled, the models they shaped, the outlines they sketched, and the landscapes and other paintings they filled in, are in some instances before us, and we can commune with them in spirit, though in flesh they are no longer redolent of life!—but pass we on.

Once more we would draw the attention of all classes, but particularly working men, to the facilities that exist for acquiring art instruction in the Metropolitan School of Art. Here the young art pupil, intending art

teacher, the designer, pattern maker, the young skilled craftsman who, ambitious to become a foreman, clerk of works, or the higher grade of architect or engineer, may find the rudimentary practical instruction he requires. Students here can also avail themselves of the opportunities afforded by the presence of a large collection of examples and models in the galleries of the institution. The course of instruction embraces freehand, architectural, and mechanical drawing; painting in oil, tempera, and water colours; modelling, moulding, and casting. Prizes are many and of various sorts, for success at the annual examinations; and the past National Competitions have shown that the Dublin School maintains a distinguished place compared with other schools. With a view of affording facilities for the training of teachers, four scholarships will be attached to the school, which will be open to the students of other schools of art in Ireland on the same conditions as at the Central School at South Kensington, London. As an encouragement to advanced students to attend in larger numbers and to prolong their stay in the schools, free studentships will be offered for competition to artisans being draughtsmen, designers, and modellers, or handicraftsmen, who shall submit satisfactory advanced works, and who are prepared to attend regularly during the year following the date of appointment. To be brief, there are ample facilities for art instruction, and we trust our artisan classes will have wisdom to profit by them.

#### TECHNICAL EDUCATION—PRIZES FOR TURNERS.

On Friday, at the Mansion House, London, the prizes awarded by the "Turners' Company" (one of the city companies or nominal representatives of the old trade guilds), for turning in ivory, pottery, stone, jet, and in steel, brass, and gold (for horological purposes), were distributed to the successful competitors by the Lord Mayor. His lordship, after the proceedings had been opened by the Master of the Turners' Company, expressed his regret at the absence of the Baroness Burdett-Coutts, who was a large contributor to the fund from which the prizes came. He considered the exhibition which had preceded the award of prizes, and the ceremony at which the assemblage before him was assisting, very satisfactory proofs of the interest taken by the Turners' Company in the all-important subject of education. Brief addresses were then delivered by several of the judges, who were able to speak in high terms of the skill shown by some of the competitors. Mr. Doulton, the judge of pottery turning, said there was a grand future before the city guilds if they would only rise to a sense of their moral responsibility. The cultivation of higher art required for its encouragement the establishment of an institution of the nature of an industrial university. Mr. V. Simons, judge of the stone and jet turning, and Mr. John Jones, one of the judges of steel, brass, and gold work, having also addressed the company, the prizes were delivered by the Lord Mayor, the first in ivory being handed to Mr. John Hegley; the first in pottery, with the freedom of the Turners' Company, to Mr. E. Bryon; the first in stone and jet, with the freedom of the company, to Mr. J. Nankervis; and the first for work in steel, brass, or gold, with the freedom of the company, to Mr. C. Crisp, whose specimens were pronounced to be in perfect style. Votes of thanks to the Baroness Burdett-Coutts, to the judges, Mr. Richard Loveland Loveland (Master of the Turners' Company), and to the Lord Mayor and Lady Mayoress, brought the proceedings to a conclusion.



## THE CONFERENCE OF LIBRARIANS.\*

THE Conference of Librarians opened its proceedings on Tuesday, 2nd inst., at the London Institute, Finsbury Circus. Over 200 persons have joined, including representatives from France, Italy, America, and Australia. It is to be regretted that such a centre of literature as Germany was not more largely represented; but this deficiency could not have arisen from any want of sympathy with the objects of the meeting.

Mr. J. Winter Jones gave an inaugural address of an hour-and-a-half's duration. The idea of holding a Conference of Librarians, he said, originated in America—in the country which had set the world so many good examples of energy and activity, among which a Conference of Librarians was not the least valuable, looking to the practical results which might be anticipated from it. The present meeting would have the advantage of the presence of several of the able and accomplished men who took part in the Conference at Philadelphia. After referring to the noted libraries of antiquity, the monastic collections of the Middle Ages, and the principal libraries of the Continent, the paper dealt with the entire range of subjects set down in the programme. On the practical part of a librarian's business Mr. Jones remarked that the librarian ought to be much more than an officer in charge of books, without quite endorsing Mr. Mark Pattison's opinion that "a librarian who reads is lost." Shelves ought not to be raised more than 8 ft., in order that the upper shelves might be reached by small and light steps. Barrows for carrying the books should be padded. With respect to lighting in the evening, gas was known to be injurious to the material of books; and as it was impossible to secure perfect combustion by ordinary burners the sunlight burner was the safest form, but unfortunately a particular construction of building was necessary for the use of this apparatus. The system of heating by hot water pipes was preferable to any other. Selection of books should be left to the librarian rather than to a committee, due care having been taken in the selection of the single responsible officer. On the cataloguing of books, maps, and MSS. Mr. Jones dwelt at great length. Bookbinding had greatly increased in cost in the last few years. This industry ought to take its place among the decorative arts. Questions of hours of occupation and salaries were also touched upon.

Mr. Winter Jones' address was very warmly received, and at its close Prof. Justin Winsor proposed a vote of thanks, which was carried by acclamation.

Mr. W. H. K. Wright read a paper "On the best means of promoting Free Libraries in Towns and Villages." The gist of it was a suggestion that Board Schools should be used as the machinery for popular libraries, and that local effort in this direction should be supplemented by State aid. Prof. Levi, Messrs. Yates, Iliff, Cross and others joined in the discussion, in which a considerable divergence of opinion was manifest.

Mr. W. E. A. Axon read a paper "On the British Museum in relation to Provincial Culture," in which he urged that the catalogue of the institution should be printed, and the library thus made available as a direct instrument of national culture. This, while an estimable boon to students at a distance, would also be of great service to those in London. He also advocated the publication at frequent intervals of a list of the accessions under the Copyright Act. The term duplicate was a misleading one, but there were probably real duplicates enough to form the nucleus of a national lending library.

The paper led to an animated discussion. Mr. Porter and Mr. Martineau expressed their conviction that a printed catalogue of the Museum was impracticable. Mr. George Bullen, on the other hand, endorsed Mr. Axon's suggestion. Such a catalogue, if it

cost £100,000, would be well worth the money. Mr. Winter Jones would be glad to see a printed catalogue, but there were 3,000,000 titles, and it would be of no use if these were not properly arranged. The printing would take twenty-five years, and there would then be 300,000 fresh titles to add.

Mr. C. H. Robarts then read a paper "On University Libraries as National Institutions." Unless a University was constantly developing itself for the benefit of the whole nation it could not justify its title to be considered a national institution. The Universities of Oxford and Cambridge have now been brought under State control, and their national character has been established by a long series of efforts; and in a centralising age, such as the present, they have still a great future before them as independent centres of free learning and science, not only for this country, but for all the world. The extraordinary resources of these Universities for the development of their libraries justified their being taken as examples of the subject under consideration, more especially in the case of the University of Oxford, whose library Hallam described to be the one great cause of its literary distinction. The development of a perfect library organization should be the central feature of the modern University. Above all mechanical aids to learning there is need of skilled assistance and bibliographical knowledge. No professorship, in Emerson's words, is of greater value than a professorship of books. Of all forms of endowment, that which provides the means of study impartially to all, both rich and poor, is the least liable to abuse, and whether Universities are considered as educational or literary centres such an expenditure is most to be desired. The resources of the library of a great University such as Oxford should bear some comparison with those of the British Museum, for which £60,000 a year is raised from the national taxes, while the Bodleian has scarcely £7,000. The urgent needs of the Bodleian require nothing from local or national taxes, and nothing from any funds now applied to education or learning, but merely the honourable association of the Bodleian with All Souls', a college in close proximity to it, in the very centre of Oxford, whose revenues in a few years' time will reach nearly £24,000 a year, and whose magnificent library, specialised to law, is already partly established as a public institution. During the passage of the Universities Bill through Parliament the existence of the All Souls' Law Library was the chief justification which the college received at the hands of the members for the University; but it was through the ability and exertions of the Earl of Morley that a clause was introduced giving the commissioners power to carry the proposals into effect. It is greatly to be hoped that the hands of the commissioners will be strengthened by all those who wish to see the Universities centres of learning, not only for this nation, but for all the world.

In the afternoon the library of Sion College was visited under the guidance of the Rev. W. H. Milman, and the Guildhall Library under that of Mr. W. H. Overall and the chairman of the Library Committee.

The evening meeting commenced with a discussion on Mr. Robart's paper, after which Mr. Cornelius Walford read an amusing paper "On Special Collections of Books." His desire is to facilitate the exchange of titles and duplicates between different public libraries and private collectors. The printing of lists of special collections by the (proposed) Library Association was also suggested.

A paper by M. Guillaume Depping was read suggesting the appointment of a commission to inquire into the alleged damage done to bindings by gas.

Mr. W. F. Poole said that books cannot live where men cannot. Bookcases should not be more than 8 ft. high. The upper part of lofty rooms become too hot. Mr. Poole spoke in grateful terms of the 7,000 volumes sent from England to replace the losses by the

Chicago fire. These gifts were from the Oxford University, from the Queen, from Thomas Carlyle, and many others. The American expenditure on town libraries was considerable. At Chicago they spent 60,000 dols., at Boston 125,000 dols. yearly.

Mr. W. H. Overall denounced gas and architects as the direst foes of libraries, and was near pronouncing for the entire abolition of architects, whose cause was taken up by Dr. Acland, who happily said that it was the duty of the architect to do beautifully what the librarian required for purposes of utility.

Papers were then read by Mr. Robert Harrison, Mr. J. M. Anderson, and Mr. J. D. Mullins. The last had reference to free town libraries.

Mr. Justin Winsor occupied the chair on Wednesday morning, when Mr. P. Cowell, of the Liverpool Free Library, gave a paper "On the Admission of Fiction in Free Public Libraries." This is a subject greatly debated. He did not propose to forbid novels, but thought that only the best class should be purchased, and that sufficient inducements for the illiterate to read might be found in illustrated and other periodicals. The discussion was continued by Messrs. Winsor, Mullins, Baron de Watteville, W. F. Poole, and the Rev. H. O. Coxe. The general opinion seemed to be that the taste for novel-reading was a natural stage of intellectual development from which higher tastes might be expected to arise.

A paper followed, by Mr. H. W. D. Dunlop, "On a New Method of rendering Slip Catalogues available for Public Reference."

Mr. Henry Stevens read a paper "On Photobibliography," a proposal to make photographic copies of the titlepages of books. This was illustrated by facsimiles of many rare books to which the system has been applied. Photography is now being utilised in this manner in France. Other papers on cataloguing followed: one of a very general character by Mr. J. M. Anderson; one descriptive of the Glasgow University catalogues, by Mr. R. B. Spears; and one by Mr. C. Walford.

Mr. B. R. Wheatley read an amusing paper "On an Evitandum in Index-making, principally met with in French and German Scientific Periodicals." Mr. Wheatley directed much well-merited indignation against some pretentious indexes of modern days—one notable instance being the forty perfectly useless indexes to Allibone's "Dictionary of Authors."

Mr. J. A. Hjaltalin read some "Remarks on Rules for an Alphabetical Catalogue."

In the afternoon the Conference visited the British Museum, where the processes and apparatus for the supply of books to readers were inspected and explained. Afterwards Mr. Winter Jones had a reception at his house.

Sir Redmond Barry presided at the evening meeting, where Mr. H. B. Wheatley read a paper on "The Alphabetical Arrangement of the Titles of Anonymous Books." In opposition to the rules of Barbier, Mr. Wheatley advocated the selection not of the first word but of a word indicative of the subject. Letters were read from M. Depping and Prof. Max Müller on the subject of the co-operative catalogue. Mr. C. Walford suggested a new general catalogue of English literature, and pointed out the great want of such a guide to the literary treasures of the language, and the inadequacy of the partial attempts now in existence.

Mr. J. Ashton Cross urged the preparation of a Universal Index of Subjects. The undertaking was not so gigantic as at first glance it might appear. Much had already been done by individual effort; and by the hearty co-operation of different librarians and students, each dealing with a special topic in which his own collection was strongest, the work could be accomplished. We have on a previous occasion explained the nature of Mr. Cross's proposal, which appeared to meet with some favour. Among those who endorsed it was the Abbate Mondino, who suggested also the preparation of a general

\* From the Academy.



catalogue of the MSS. existing in European libraries.

The Conference then appointed a committee to deal with the subject of the proposed new edition of Mr. W. F. Poole's "Index of Periodical Literature." This was commenced by him when a student at Yale, and the last edition appeared in 1853. It is now proposed to supplement this work by a co-operative effort, and bring it down to date, the efforts of English and American collaborators receiving the benefit of Mr. Poole's final revision.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

THE Crow-street management having, as they thought, seen the end of Smock-alley danger, endeavoured to stem the tide of public favour by presenting attractive and expensive entertainments. No expense was spared to make the Crow-street house the theatre of Ireland, and equal to any that London could boast of at the time. Indeed, Barry launched into expenses far beyond his power to recoup, had the population of Dublin at the time been as large again, and his patrons a third or more numerous than they were. The plays at Crow-street, particularly the tragedies, were expensively and splendidly got up, considering the time, however modest they may appear now in the light of modern theatrical sights. The mere guards in "Coriolanus" cost £3 10s. per night, and the guards and chorus singers in "Alexander" cost £8. The acting of the tragedies, remarks Hitchcock, was first-rate, the farce of the "Two Heroes of the Buskin" being aided by the powerful attractions of Mrs. Daneer and Mrs. Fitzhenry. The following are adduced as affording specimens of the strength of their representations:—Othello, Barry; Roderigo, Woodward; Cassio, Dexter; Brabantio, Walker; Iago, Mossop; Desdemona, Mrs. Daneer; and Emilia, Mrs. Fitzhenry. In "Venice Preserved": Pierre, Mossop; Jaffier, Barry; Belvidera, Mrs. Daneer. In "Jane Shore": Hastings, Barry; Dumont, Mossop; Jane Shore, Daneer; Alicia, Fitzhenry. In "All for Love": Antony, Barry; Dolabella, Dexter; Ventidius, Mossop; Octavio, Daneer; Cleopatra, Fitzhenry. The above were supplemented by Woodward's capital pantomime, and, on the whole, the bill of fare of the Crow-street theatre of that day was very attractive.

While at Smock-alley, under Brown, Mrs. Abington's popularity daily increased; and it was not only the wish of the Crow-street managers to secure this talented actress, but the desire of a large number of the patrons of the latter theatre. After some negotiations and influence being exerted in her favour, an engagement was concluded for her performance for a few nights for a clear benefit. On the 22nd of May, 1760, Mrs. Abington made her first appearance at Crow-street, in the characters of Lady Townley and Lucinda in the "Englishman in Paris," being the night appointed for her benefit. It appears that she was so well patronised and received on the occasion, that part of the pit was laid into boxes, being a great overflow from every portion of the house. "So rapidly did this charming actress rise," writes Hitchcock, "and so early did she discover a taste in dress and a talent to lead the town, that several of the ladies' most fashionable ornaments were distinguished by her name, and the Abington cap was the prevailing rage of the day."

While matters were proceeding somewhat evenly at Crow-street in the early part of 1760, and while Barry was dreaming of future conquests, unquieting rumours began to spread about of a new opposition. As no such thing was anticipated by the Crow-street management for a time, they gave no heed to what they considered an idle report. A short time, however, convinced them that an opposition was really intended, and that the prime leader of it was then in their

service. Before the end of April all doubt upon this very anxious question was set at rest, for Mossop, on being asked by the Crow-street managers to renew his articles, frankly told the astonished Barry and Woodward that he designed to open Smock-alley theatre in the ensuing winter. The Crow-street managers were prepared to encounter an ordinary opposition, but one led by such a capital actor as Mossop was likely to upset their plans not a little. Smock-alley was thought to be crushed, but here was Smock-alley rising again as it were from its ashes, with a powerful rival in the field. The danger was seen at once, and every inducement was made to dissuade Mossop from his hazardous enterprise. The Crow-street managers even offered Mossop terms beyond their ability to fulfil, but all overtures were firmly rejected.

It is said that Barry and Woodward saw their error too late—that of bringing over to Dublin so great and dangerous a favourite. It was not unlikely, however, that Mossop would have found his way to Dublin at a not much later date when he found that an open existed for him, and as he had an ambition, like his countrymen Sheridan and Barry, to try his hand at managing the Dublin theatre, and occupying a prominent position in connection with the Irish Stage. Mrs. Abington elected to stay in Crow-street, being offered a very eligible engagement, and between her and Mrs. Daneer the distribution of the pieces was equally divided, for both were excellent actresses, and the latter good in comedy as well as in tragedy.

One of the most brilliant and successful theatrical seasons known in Ireland terminated at Crow-street on the 9th of June, 1760, with the tragedy of "Oroonoko," the cast being: Oroonoko, Barry; Imoinda, Mrs. Daneer; and the Virgin Unmasked, Mrs. Abington. On the close of the theatre Woodward proceeded to London to recruit for the next season, and shortly afterwards Barry left Dublin on the same mission. In the meantime Barry led his company to Cork, where a new theatre was shortly afterwards opened, but of this and some other matters in connection we will refer hereafter. Theatrical disputes were often rife in Dublin, and the anticipated opening of Smock-alley under Mossop gave rise to considerable discussion.

In 1760, and even at a much later date, the question of a plurality of theatres was warmly and fiercely debated. However, a single national and representative theatre might have sufficed for Dublin in the last century, such a provision would not answer in these times. It was held a hundred and twenty years ago, and indeed a century ago and under, that the exclusive establishment of a single theatre is sufficient to secure the entertainment of the public, while it precludes the distraction and distress naturally incident to contending parties. On the other hand, such an arrangement is disclaimed as a monopoly, and that all monopolies are partial and unjust, as people should not be fettered, and that they should be free to choose what they liked best as their natural right.

It has been seen in the course of our notes that Dublin had at a much earlier date in the eighteenth century than that of which we are now treating, not only two but double that number of theatres, with other places of amusement. They were not of course successful, although they had occasional short seasons of good luck, for the play-going public were not in sufficient numbers to support them. Had we lived in Dublin in 1760, we would probably be disposed to think that one really good and well-conducted theatre would have been sufficient for this city, but in view of present wants, or those existing during our time, we could not be willing advocates in favour of any theatrical monopoly. Two good theatres could have existed and prospered in Dublin throughout the greater part of the present century, and ought to have been well patronised during the last twenty years of the eighteenth century.

Mossop returned to Dublin towards the end of September, and Smock-alley was put in thorough repair, which, we are told, it stood in much need of. A new set of scenes were painted by Edwards, and a new wardrobe provided. The Crow-street theatre was also done up by being newly painted and decorated. On Friday, October 24th, 1760, this theatre opened with a new occasional prologue written and spoken by Woodward, who it seems with a show of spirit affected to make light of the impending opposition, thus repeating the lines of Hotspur's:—

"Harry to Harry shall, and horse to horse,  
Meet and ne'er part, till one drops down of course."

The first night was not at all crowded, and the play chosen was thought to be appropriate for the occasion, "All's Well that Ends Well"—Captain Parolles, Woodward; Helena, Mrs. Daneer; followed by the "Lying Valet."

Preparations for the opening of Smock-alley were pushed forward with expedition, and much influence was exerted by members of the nobility and gentry in the interest of Mossop. He had collected an excellent company, and was admired as a capital actor; and, apart from his own views as to abilities and position, he had a strong following of warm and attached friends who augured his success certain. Chief among Mossop's patrons, who used their influence in his favour at this time, was the Countess of Brandon, but in addition he counted upon and met with practical encouragement at the hands of Lady Rachel McDonnell, Miss Caulfeild, the sister of Lord Charlemont, Miss Adderley, Lord Antrim, and other persons of rank and fashion at that time. We have already given an estimate of his dramatic character compared with that of his countryman and fellow-actor and now rival.

The comedy of the "Old Bachelor" was the play fixed upon and announced for the opening night, but on the morning of that day an unforeseen event darkened Mossop's brightening prospects. News of the death of George II. arrived in Dublin on the morning of October 29, and led to the closing of both theatres—a stroke of adverse fate, not only to the managers of both theatres, but to the poor dependent performers who could ill afford their forced loss of salary. By the consideration of the Government the usual time of mourning was much shortened, and after the limited time the managers of the now rival theatres redoubled their exertions to satisfy an expectant public.

Crow-street, which continued to be the Theatre Royal, opened on Monday, the 17th of November, with the "Busy Body"—Marplot, Woodward; Miranda, Daneer; and the "Intriguing Chambermaid." No new faces appeared on this occasion at Crow-street. At Smock-alley the "Old Bachelor" was again resumed, Weston making his first appearance in the character of Fondlewife, and receiving considerable applause. Weston remained in Dublin during the entire season, and, though he had not at that date obtained the reputation that he afterwards reached, he appears to have established himself as a favourite by his comic humour and good acting. Weston was well received in the following pieces:—The "Lying Valet"; Cymon in "Damon and Phillida"; Old Man in "Lethé"; Daniel in the "Conscious Lovers"; Clown in "Measure for Measure"; Old Woman in "Rule a Wife," and other pieces of a kindred style.

The first night at Smock-alley brought out the familiar face of Sowdon in Heartwell, and Sparks in Noll Bluff, and Miss Kennedy in Letitia. The two first-named actors had changed sides by leaving Crow-street for Smock-alley, the boards of which they were well acquainted with and had often played upon.

Griffith, a comedian of some note, and for some years the principal support of the Bath Theatre, appeared at Smock-alley on the second night. He was a native of Dublin, a son of a Mr. Griffith already mentioned in our notes, and a brother to the once well-known Mrs. Griffith, an authoress of repute

\* See ante.



in the literary world of the latter half of the eighteenth century. Griffith held some situation in the Customs before taking to the Stage, for which he possessed some taste and abilities. He is thus described:—"His person was small, but uncommonly elegant and well made. He was easy, sprightly, and fashionable; had a marking eye, a pleasing countenance, a good voice; he perfectly understood his author, and had great judgment. With these requisites, he supported the highest characters in comedy with *eclat*. He had much of the gentleman in his manner, and was beloved and esteemed in private for his many amiable and engaging qualities." Griffith made his *début* in the character of Ranger, which he supported well, and which was repeated a few nights afterwards by desire. He also appeared in Sir Harry Wildair and a variety of other characters.

"Two Pollys," remarks Hitchcock, "made their appearance at the two theatres much about this time." These were Miss Bridges and Miss Greene; the former appeared at Crow-street with the Macheath of Vernon and the Lucy of Mrs. Abington, and the latter at Smock-alley, where Brown, the late manager, had gained applause in the personation of the popular hero.

The two theatres being now in active rivalry, and contending for mastery, the play-going citizens were much divided in opinion, and letters and criticisms were freely indulged in, and published in more than one of the public prints. The balance of criticism was allowed after a short time to incline towards Mossop, whose company was considered excellent. He had secured several of the most respectable and talented members of the Crow-street body, not a few of them being favourites at the time. Among those who had now enlisted under Mossop's banner were: Sparks, Heaphy, Sowdon, Corry, Aldridge, Miss Mason, Miss Rosco, Miss Carolina, and the already-mentioned Mr. Griffith, Miss Kennedy, and Miss Greene. West Digges, who was in Edinburgh at this time, was induced after some little difficulty to return to Dublin, where he was a favourite. His accession to Smock-alley added considerable strength to Mossop's company.

The Smock-alley manager's next effort was to secure Mrs. Bellamy from Covent-garden, and he was not without hopes also of securing Mrs. Fitzhenry, but in the latter he was disappointed. Necessity obliged Mossop to secure Mrs. Bellamy at any cost, as he needed her services in tragedy. In securing this talented actress he had to comply with her terms, agreeing to give her a thousand guineas, besides two benefits for the season. This was a large risk for the manager of a Dublin theatre nearly a hundred and twenty years ago to run. Opposition was, however, rife, jealousies were fierce, acting was good, party feeling was strong, and Dublin, that could have scarcely supported more than one good theatre, elected to halve itself to support two—not altogether out of love for the drama, but for the love of certain actors and other persons and opinions.

#### PAPERHANGINGS.\*

It is difficult to determine the period when paperhangings were invented. They are supposed to have first been made in China, and the introduction of these hangings into Europe probably suggested the manufacture here. It is generally allowed that flock hangings were first manufactured in England, and invented by Jerome Lanyer, who obtained a patent in the reign of King Charles I., dated 1st May, 1634, and carried on his art in London. In this patent it is stated "that by his endeavours he hath found out an art and mystery of affixing wool, silk, and other materials of divers colours upon cloth, silk, cotton, leather, and other substances, with oil, size, and other cements, to make them useful for hangings and other occasions, which he called *Londriniana*; and that the said art is of his own

invention." M. Savary, in his "Dictionary of Commerce," 1720, says that *tonture-delaïne*, or flock hangings, were first made at Rouen, but in a coarse manner, being only used for grounds, on which, with flocks of different kinds, were formed designs of brocades. They essayed to imitate tapestry hanging, but not satisfactorily; and at last a manufactory was established at Paris in the Fauborg St. Antoine, and there flowers and grotesques were introduced with success. The manufacture is thus described by him: "The artist, having prepared his design, drew on the cloth, with a fat oil or varnish, the subject intended to be represented; and then the flocker, from a tray containing the different tints of flocks arranged in divisions, took the colours he required, and sprinkled them in a peculiar manner with his finger and thumb, so that the various shades and colours were properly blended, and an imitation of the woven tapestry produced." These descriptions, though detailing the manufacture of flock hangings, yet do not allude to the use of paper as a ground, nor to blocks for printing.

A French author, writing in 1723, says that paper-hangings called tapestry in paper were, till lately, only employed by the country people for their cottages, or by small tradesmen in their shops and rooms; but towards the end of the 17th century the manufacture was raised to such a point of perfection and beauty, that, besides the quantities that were exported abroad and to the principal cities of the kingdom, there was scarcely a house in Paris not decorated with it. The manufacture at that time is thus described: The design, having been drawn in outline on paper pasted together of a suitable form, and given to the carver or wood engraver to cut the designs on blocks of pear tree, much in the same manner as at present. The outline thus cut was printed in ink, with a press, on separate sheets of paper; when dry, these were painted by hand, in distemper colours, and afterwards joined together so as to form the required design. Grotesques and panels, in which were intermingled flowers, fruits, animals, and small figures, were then executed by the above process. M. Reveillon, of Paris, is considered to have introduced many improvements in this manufacture, and was celebrated for the beauty of his productions, in the latter end of the last century. The pillage of the workshops of this manufacturer was one of the first incidents of the Revolution in 1789. In England this manufacture continued from the time of Lanyer, and obtained a high reputation. In 1712 a duty of 1½d. per yard was imposed; and a Mr. Jackson, who established a factory at Battersea for paperhangings of classic design in *chiaro-oscuro*, writes in a work published in 1754, in praise of his own productions and condemns the fanciful paperhangings at that time so much used, comparing them with the Chinese. In the year 1786 there was established at Chelsea a manufactory for paperhangings of a very superior description, by George and Frederick Echaridis. Works, even excelling those of the present day, were produced at this place. The blocks had great merit in the design, and some were 8 ft. in length. These manufacturers carried the art to its highest point in England; they printed not only on paper, but also on silk and linen, and employed a number of artists in addition to women and children. M. Sheringham, of London, also excelled at that time in decorative paperhangings. During the present century the French have not only restored this branch of manufacture to a high state of perfection, but have introduced many important improvements, such as the embossed flocks and the shading of flocks, the perfect imitation of chintz, improvements in the satin grounds, and the introduction of work printed from engraved cylinders. The process of manufacturing ordinary paperhangings, as now carried on, may be thus briefly described: The pattern being first carefully drawn, is then pricked, and the outlines of the various tints are each punched on a separate wood block made of pear tree mounted on pine.

These blocks are pressed on the sieves of colour, and then applied to the paper, each block following the other on the guide marks left by the previous impression. In making flock paper, the pattern is first printed in size, and then with a preparation of varnish of Japan gold size. When this is partly dry, coloured flock, prepared from wools, is sifted on the varnish pattern, to which it adheres. When gilding is introduced, the hangings are prepared much in the same way as flock. The leaf metal is laid on the varnish pattern, or, if worked in bronze powder, it is brushed over with a hare's foot.

#### THE PROGRESS OF "RESTORATION."\*

A CORRESPONDENT writes:—"Few of those who have wondered at the immense aggregate sum spent of late years in church building and restoration, as shown in a recent Parliamentary return, have any knowledge of the expedients by which money is at times raised by the clergy, expedients which, in many cases, recall the large-minded indifference of Vespasian to the source of revenue. In my own neighbourhood a fancy fair was got up, the chief attraction of which, to judge by the advertisements, was to be a stall, or more properly, a bar, at which the incumbent was to sell beer and sandwiches. Some one, who may have felt that it was degrading to his parson's status that he should appear in the character of a pot-man, gave notice of the projected performance to the Inland Revenue, but 'the result,' in the words of the penny-a-liner, 'did not transpire.' I have lately heard of funds being raised for the restoration of a church near Aberystwith by means of a raffle, the objects of which were 'a calf, some chickens, a donkey, a pig, and a peacock.' A clergyman who wishes to raise £3,600 for the restoration of a church in Yorkshire, has sent out a circular headed, 'One Shilling for a Church.' 'By the most strenuous exertions £2,000 have been raised,' and, as a last effort to extract from the public the remaining sum, the appeal concludes with these touching lines:—

The drop that from the sky distils,  
The stream that gushes from the hills,  
When single, each descends in vain;  
But drops combined make fruitful rain,  
And streams with other streams allied,  
Swell to the river's lordly tide.  
So, Christian, here each mite of thine  
Shall with unnumbered mites combine,  
As drops refresh the thirsty sod,  
To reconstruct the house of God."

A copy of this "appeal" is now before us.

Among the more important works of "restoration" now in progress in Yorkshire may be named Cockan Church, Bransdale, a fine "Norman" building, where the operations are described as "thorough." A new chancel is to be added to the church of St. Mary, Rokeby; we do not know that the population of the neighbourhood Sir W. Scott made famous has so greatly increased as to compel the erection of a chancel. St. Peter's Church, Pickering, is described as "in the hands of the builders"; at a cost of £8,000 in money only, a sum that is within a few hundreds of the price of the large edifice of brick in Garden-street, Westminster, one of the handsomest churches in the metropolis, a work of Mr. Street's. £8,000 is about the price of more than one of the large churches built by Mr. Brookes in the east of London, which are masterpieces of design and fine specimens of building. Every one knows that it costs a great deal more to ruin an old church by "restoration" than to build a new one. This seems paradoxical, but no doubt Mr. Five Per Cent. can account for the fact. Pickering Church dates, or rather was dated, from the twelfth century; its Norman tower is to be rebuilt, likewise the north transept, the south transept is to be "restored," the chancel "re-roofed," and the pews are to be removed. The final touches of a contemporary description of these works are significant:—"The church is full of interesting

\* From paper by Mr. Redgrave, R.A., at Social Science Congress, Aberdeen.

\* From the *Athenaeum*.



antiquities, *most of which* will be preserved in the restoration." The italics are ours. The Priory Church of St. Mary, Malton, the best known of all these relics of antiquity, is a remnant of a convent founded in 1150 by Eustace Fitzjohn; here "a very ruinous but magnificent Norman tower is fast being restored." We are told that the estimate for operations on the exterior of the entire church exceeds £6,000.

### MORTAR MIXING.

In the preparation of the various mortars, the first operation is the slaking of the lime or cement. In the case of the latter class of materials, which are always ground before being used, the only precaution to be observed is to avoid bringing them into a fluid state, or, in other words, it is advisable only to add enough water to bring them to the consistency of a tenacious modelling clay, especial care being also taken to moisten the stones or bricks to be used simultaneously with them, so as to prevent any absorption of moisture from the cements. In the case of the hydraulic limes, when used without being previously ground, the slaking is either performed in pits, or by aspersion, or by immersion; and the object to be obtained is to cause the lime to fall into a fine, dry powder, in the state of the hydrate; which powder, however, would not possess the power of crystallising without the addition of a further quantity of water. This additional quantity of water is added at the same time as the sand, introduced for the purpose of affording nuclei around which the crystals of the lime may arrange themselves; and it is indispensable that the whole of the lime in a mortar should have been thoroughly slaked before it is placed in the work. At the present day, in all large building operations, the mortar is made by means of pug-mills or mortar-mills, and when these machines are properly used the mortar is more uniform in quality, and more free from cere, than in the ordinary process of manufacture. This cere is, in fact, the underburnt lime, which slakes, when in lump, less quickly than the rest of the lime, and is, therefore, supposed to take on its action of expansion at a different period; this action would, perhaps, disturb the crystallisation of the rest of the work, and great precautions are required to prevent its occurrence; it is known among workmen by the phrase of "the lime blowing." The pure, rich limes are more exposed to this class of action than even the hydraulic ones, because in the process of calcination some portions of the limestone become not only under, but others become over burnt, and the periods of slaking of the cere, produced by either of those causes, differ materially from that of the normal lime. Great care is therefore required in slaking the rich limes, and the old Romans seem to have adopted the custom of slaking them at least three years before the mortars were made; a far greater quantity of water may be used with these limes than with the hydraulic varieties, and indeed the London builders, when about to employ the ordinary chalk lime for plastering purposes, actually "run it," as they say, or reduce it to a fluid state and run off the liquid into a tank, where the excess of water is allowed to evaporate. This operation of running would effectually destroy any of the hydraulic limes, and it is important with the latter only to present the quantity of water strictly required for its hydration. Unfortunately working men are so careless that it is practically impossible to ensure the observance of the precaution of keeping the bricks or stones so wet as that they should not be able to abstract moisture from the mortar, and thus it almost always happens that, even in the manipulation of hydraulic limes, a larger quantity of water is used than would be theoretically required. The proportion of lime and sand for mixing for hydraulic works should be ascertained by some safer test than the eye of the labourer charged with making the mortar. Be this as it may, the sand to be

used for mortar should be a clean, sharp, silicious sand, free from loam, clay, and large lumps of stone, or of oxide of iron; and it must be distributed as equally as possible through the mass.

### THE ROYAL DUBLIN SOCIETY.

At a meeting of the council of the Royal Dublin Society, held on 4th inst.,

Sir GEORGE F. HOBSON, Bart., D.L., Vice-President, in the chair,

the following report relative to the evening scientific meetings was adopted, viz. :—

The Committee of Science beg to recommend that the business of the evening meetings shall in future be conducted in three sections, instead of one as heretofore.

1. Section of Experimental Science.
2. " Natural Science.
3. " Science applied to the useful arts and industries.

That the sections shall meet on the same evening in different rooms in Leinster House, and that the committee be empowered to invite other scientific bodies to take part in the proceedings of the section; and further, that the council be asked to associate additional members (according to an accompanying list) for the purpose of the better carrying out the arrangements for the meetings.—(Signed).

J. EMERSON REYNOLDS, M.D.,  
Chairman.

According to the arrangement effected between the Government and the Royal Dublin Society, such papers as shall be presented to the society will be printed with full illustrations, at the cost of the Government, in the transactions and proceedings of the society.

With the view of carrying out the arrangements contemplated in the Act of Parliament for the establishment of a Science and Art Museum in Dublin by effecting an amalgamation of the agricultural department of the Royal Dublin Society with the Royal Agricultural Society of Ireland, five members of each body have been appointed as a committee to devise a plan.

John Purser, Esq., Professor of Mathematics, Queen's University, and the Rev. Thomas Lyttle, The Manse, Sandymount, were elected life members.

We may mention that, according to the arrangement effected with the Government, all persons admitted as members before the 1st January next will have the same privileges as existing members of the Royal Dublin Society—viz., among others, the right of borrowing books from the National Library of Ireland, of access to the reading-rooms of the society, of admission to the Government Museum of Science and Art, and to all shows held by the Society. With such advantages offered to the educated classes of our citizens, it is to be hoped that a large number will avail themselves of the opportunity of becoming members of a society devoted to the cultivation of science, pure as well as applied. Annual members admitted between the second Thursday in November and the 31st of December following will only be required to pay the entrance fee of £3 3s., and the annual subscription of £2 2s., which will hold good till the 31st December, 1878.

### WORK AND WAGES.

At the Trade Unions Congress, held at Leicester from the 19th till the 22nd ult., Mr. Thomas Brassey, M.P., spoke on "Work and Wages in 1877." He denied that the volume of our trade had diminished while that of other nations had increased, and pointed out that wages might be higher here than elsewhere, but the labour performed was cheaper from its greater effectiveness, and from the saving of unnecessary supervision. What had been the results of the French treaty? Our imports from France had risen from £17,000,000 to £47,000,000; but our exports to France, in spite of the heavy duties, had increased 185 per cent. Success could not have been attained except by the co-operation of skilful labour with well-directed capital.

The English workman might claim to share with his employer the merit due to that combination of cheapness of cost with excellence of quality which had secured for us the pre-eminence we enjoyed in the expert trade of the world. Grave faults were imputed to our working classes, and their conduct in many instances deserved censure; but when we looked abroad we heard exactly the same complaints, however low the wages. In those trades in which we were exposed to foreign competition the English workman had in the main performed work fully proportionate to the difference of wages in his favour, and the fact that we were running a close race in some branches with a country where higher wages prevailed than those earned in England was proof that the cost of labour was not correlative with the scale of wages. The American workmen were conscious of the necessity of working hard and well in order to keep up the higher wages which they were at present earning, and any regulations whereby the native vigour of the British workman was restrained must in the end prove fatal in their consequences. No doubt the effects were less baneful, in a commercial point of view, in the building and other trades, which were not brought face to face with foreign competitors; but, considering that improved dwellings were so urgently needed for the working classes, the unwisdom of imposing rules and restrictions tending to augment the cost of building must be patent to all. It was because it was so important to inspire workmen with the hope of bettering their condition that he had always advocated the principle of payment by results. Many trade-unions objected to it, on the ground that payment by the piece led to overwork and bad workmanship. The answer was, that whatever might be the particular form of payment, it was necessary to give to the workman a personal motive for exertion. This must come from the prospect of participation in the profits which had been earned by his labour. His share in those profits should, of course, be proportionate to the amount of labour which he had contributed. The present depression of trade could not be laid wholly, or indeed, mainly, to the charge of the workmen. If they examined the recent labour movement historically it would be seen that in order of time the inflation of trade preceded the inflation of wages, and the capitalist must bear his share of the responsibility. In the discussions on the prolonged depression, the exorbitant price of labour was continually referred to. They heard but little, however, of the larger share of blame which rested upon the capitalists, the employers of labour, and the investors and lenders of money, who overstocked the markets and caused goods to be sold at ruinous prices, and who, by encouraging speculative building, had raised wages to the present level. In every country and in every line of business the same tendency to overtrading had been manifested. There was a striking instance in the steam communication between Liverpool and New York. New companies had been established, and the fleets of the older firms enlarged. The superfluous construction of numerous costly vessels on the Clyde had had more effect in making labour scarce, and therefore dear, than all the machinations of the local trade-unions. Again, the manufacturing industry of the country, especially in coal and iron, had been injured by the abuse of the facilities afforded by the Joint-Stock Companies Acts for the conversion of private business into corporate enterprises. Mr. Gladstone had denounced in telling language the folly of investors who deluded themselves with the belief that they could expect with shareholders in a company to reap all the profits which had before been earned by trained and experienced manufacturers, who had spent their early lives in the learning and their maturer years in the administration of a complicated industry. Sir E. Beckett had said that (1) unions were a combination to do less work for the given wages; (2) that they taught the fatal doctrine



that it was the business of the working men to do no more than the least they could be paid for. These grave charges might be true in a measure, but were not the whole truth. With regard to the second charge, if it were true that bad workmanship was advocated by trade unions, it must be admitted that the national reputation was still high for the production of many important articles of a quality far superior to that obtained abroad. The existence of trade unions must be accepted as a necessary consequence of the new phases into which productive industry has entered. The only practical question is how to direct this important and extensive organisation into a useful channel. The working classes were more or less in uncertainty as to the profits employers were realising, and highly-qualified commercial advisers were needed to guide the deliberations of trade unions on the subject, and they ought to receive an ample salary. It is one of the most regrettable incidents of the organisation of industry on a large scale that the personal relations between employers and their workmen had become less intimate than before. Yet how many prejudices might be removed by an honest interchange of ideas face to face in a spirit of conciliation, and with a mutual and sincere desire to declare the truth and to maintain justice.

#### A SINECURE SANITARY OFFICE.

At the meeting of the guardians of Mountmellick Union last week the question of the payment of the "consulting sanitary officer" by fees instead of salary was discussed. The chairman (Colonel Carden) stated that four years ago they appointed that official at a salary of twenty pounds yearly, not knowing what his duties might be. This fact did not prevent them changing the arrangement now. Some persons thought the salary quite too high for the work done. Mr. Cullen said they had paid their "consulting sanitary officer" £80 for the past four years, and all the times he was called upon to act in that capacity were three—that is he received £26 13s. 4d. for each visit! He moved—"That the Local Government Board be called upon to relieve the ratepayers of the union of the grievous charge of £26 13s. 4d. a-visit to Dr. Clarke as 'consulting sanitary officer,' that being the average at which he was paid since his appointment four years ago." On being put to the vote, the motion was lost by a majority of seven, and thus the matter ended for the present.

#### THE ROW ON THE RAIL.

THE strike upon the Great Southern and Western Railway is one which must appear to all a question of great moment. A head official is pitchforked into a position which he is not competent to fill—for no man who, in the short space of six months, can create a spirit of universal acrimony and dislike throughout the entire length of a great service, has any claim or fitness for a post where judicious government, firm but kind, is necessary.

The illiberal policy which has ever marked the conclave at Kingsbridge, over which Mr. J. C. Colville now presides, has brought about the present crisis; and, with an almost criminal carelessness, events are allowed to take their course, as though the board had handed over the arrangement of everything to that "Divinity which shapes our ends, rough hew them how we will." What matters it to the ten beaming lights of the board if merchandise or passengers are delayed and life endangered? No efforts have been made to bring matters to a conclusion, and here we are, after thirty-two days have elapsed, practically as far from settlement as when the first milesman threw down his pick and lit his pipe. When will some vitality evince itself? Here we have the officials on the one side and the malcontents on the other sitting calmly on their haunches, eyeing one

another and licking their lips. We have frequently heard of the pugilistic consequences when Greek meets Greek, but, to our mind, however, the junction of a pair of fools is infinitely more amusing.

In view of this evidence of the senile decrepitude of both parties, we should advise that a meeting of shareholders be summoned immediately to investigate the whole matter thoroughly, and, if found necessary, to appoint a board of arbitrators to whom the points in dispute may be referred.

OLYMPUS.

#### A BUILDING ACT AND STREET OBSTRUCTIONS.

THE daily Press and some of its correspondents have lately begun to take up our parable or text, and preach what we have ventilated unceasingly for many years. Mr. G. C. Henderson, architect, and hon. secretary of the Royal Institute of the Architects of Ireland (of which, by the bye, we have heard next to nothing for many months past), thus speaks of an obstruction in particular in Grafton-street, and of a building abuse in general:—

"Knowing something of the case, and the difficulties Mr. Lawrence, or anyone in this city placed under similar circumstances, now labours under, I would venture to call attention to the absence of any proper Municipal Building Act. In the case under notice it appears the Corporation have employed all the powers they possess regarding dangerous structures, viz.,—they have pulled down portion of 'front wall only,' they have caused an obstruction; and they have summoned. Let us now see how the owner or occupier in such a case at present stands. Well, if A move in the matter and shake or injure B or C through the removal of their lateral support, he will find himself at once exposed to the fire of two solicitors, and will be lucky to escape only inuited in costs, whereas in London and many English boroughs it would be the district surveyor's duty to interfere for mutual benefit and protection, and his jurisdiction, far from being limited to 'the front,' is so ample that, if necessary he could order the demolition and rebuilding of unsafe party-walls at the cost of the respective parties concerned. The want of this act has long been felt by 'The Institute of the Architects of Ireland,' and for years they have urged the matter on the Corporation. The last step was taken in 1876, when some of their body carefully adapted the draft of the London Metropolitan Act, and succeeded in having the main sections embodied in the general bill laid before Parliament by the Corporation last session, but withdrawn through the informality of some of the other clauses. Thus, through city bungling and repeated delays, the public, and those who have to build in particular, still labour under a crying evil."

A correspondent, W. S. K., in *Saunders* thus holds forth:—

"At this moment, in College-green, two houses are in course of erection on either side, and the contractors or builders have been permitted to put up hoardings projecting beyond the footpath into the street, and pedestrians have to 'walk the plank' in passing them; in wet weather it is no easy matter to keep one's feet on the slippery boards, to say nothing of being splashed with mud. In Anglesea-street another building is being erected, and foot passengers have to cross a dirty street to avoid a like obstruction. Now, if a petty trader in displaying his wares before his shop encroaches on the public footpath he is summoned before a magistrate, and usually fined; but the wealthy builder escapes free, as far as I know, though creating a great obstruction. Why should not No. 1 Committee of the Corporation, which was supposed to have charge of paying, lighting, cleansing, *wide streets*, and improvements, see that builders' hoardings are so constructed (as in London and elsewhere) that pedestrians can pass under the scaffolding without having to leave the pavement?"

The urgent want of a stringent building act for Dublin has been pointed out numerous times in the pages of this journal. A building act is in force in London, but it has not been found sufficient for the purpose to meet the various irregularities which exist. The Metropolitan Board of Works of London is, however, alive to the want, and has prepared a more comprehensive and stringent building act, which will probably pass into

law in the next session of Parliament. In the last issue of the *Builder* we find, *re* the proceedings of the Metropolitan Board of Works that—

"A report from the Building Act Committee was brought up with reference to the letter from the Local Government Board transmitting copies of letters from Mr. C. Clinton Hoey, calling attention to the character, foundations, and materials of certain dwellings being erected at Hackney Wick; that in reply thereto a copy of the letter of Mr. F. K. Meeson, district surveyor for East Hackney (North), be sent to the Local Government Board for transmission to Mr. Hoey. This reply was to the effect that at present the district surveyor had no power to interfere with the buildings as to the materials used in the foundations of houses. It was explained that a bill had been prepared which would give the Board power to direct surveyors to see that the foundations of houses were sufficient, and that the materials used in the erection of the buildings were sound and sufficient. That bill had not been passed in the last session of Parliament for want of time, but in the next session the chairman would introduce it. However, up to that time, nothing more could be done than that which was recommended by the committee."

It is satisfactory at least to find that the proper steps are taken in London to meet the difficulty by providing a stringent measure. Street obstructions can be put down at present in Dublin, if the existing acts are rigidly and honestly enforced by the municipal authorities; but our Corporation in several instances, for reasons we have often stated, fail to do their duty. We fear the Royal Institute of the Architects of Ireland, as at present vegetating, will work very little influence; and the Corporation of Dublin, if not exerted upon by a strong outside pressure, will still continue to dilly-dally with the question of a building act for Dublin—the great want of the time.

#### "ON STRIKE."

WE take the following from the *British Architect and Northern Engineer*:—"Carpenters in Manchester, and masons in London, thousands of good workmen out in the cold! *On strike*. Absolute suffering and discontent for the men, and inconvenience, loss, and trouble for the masters; to be continued during the whole miserable existence of a trial of strength called "a strike." And this wretched injustice to masters and men, this strike, is the only way in which the problem can be solved in the nineteenth century. It is simply a question of fighting, just as the Russians and Turks are now doing. The nineteenth century settles national and economic questions by fighting! Its wisdom cannot settle them, and certainly its temper and disposition cannot. And so this lengthy, unjust, and temporary method of fighting must be carried on. It is lengthy, for the masters—a mere question of capital, for the men—a question of their unions' capital and the capacity of their families and themselves for bearing suffering and trouble. It is unjust, for might will win, and might is *not* always right. It is temporary, for let the weak revive into strength and then—fight again. One conclusion we form is this—Trades unions are much to blame. Masters know what they *can* do and what they *can* not. It is for unions to obtain facts, and judge fairly and honestly of the possibilities of the case, and then effect an arbitration; write, talk, argue, work the rights of the thing until a fair arbitration is brought about. Trades unions exercise a mighty power. It should be wielded rightly. If aiming to make workmen efficient, and to obtain the best pay for the best work as a primary object, they would be a greater source of good, and afford less of a comfortable sneaking place for idle and incompetent workmen. Generally, masters are fair and reasonable, and have sufficient education and intelligence to pay a really good price to a good workman, with the knowledge that it pays so to do. Would that the relations of men to their masters were solely those of friendly commercial competition, and not of such a bitter, fierce, and resentful character!"



# ADVERSARIA HIBERNICA, LITERARY AND TECHNICAL.

ACTIVITY and industry are certain aids to health, presupposing the air to be pure and the human dwelling clean and comfortable. Laziness is a vice, for it breeds dirt and disease; but cleanliness, which necessitates industrial habits, is one of the best, if not the very best, preventatives of contagion. It takes, however, a long time to impress a body and soul saving truth upon the minds and hearts of the people. Cleanliness has been preached in all ages in one form or another, for human purity involves it, but the world of man has turned a deaf ear to the advice. Food that was got without toil, though it might appease the appetite, did not really nourish the body, and sloth became the direct fertilizer of dirt, vice, disease, and crime, ending in miserable instead of happy deaths. But why need we moralise at length on the necessity of industrial habits and cleanliness! Alas, we fear that not only now, but long after our time, it will still be necessary to preach the all-saving doctrines. Nearly a century and a-half since our great and philosophic countryman George Berkeley, Bishop of Cloyne, preached similar doctrines to unwilling ears, for there were but few in the nation had the moral or physical courage to follow his advice; and since sloth, dirt, and disease grew apace. Listen to the words—the remarkable words—of the good bishop:—

"If the same gentle spirit of sloth did not sooth our squires as well as our peasants, one would imagine there should be no idle hands amongst us. Alas! how many incentives to industry offer themselves in this island, crying aloud to the inhabitants for work? Roads to be repaired, rivers made navigable, fisheries on our coasts, mines to be wrought, plantations to be raised, manufactures improved, and, above all, lands to be tilled and sowed with all sorts of grain."

And, again, he writes truly:—

"A light house, warm apparel, and wholesome food are sufficient motives to labour. If all had them, we should be a flourishing nation. And if those who take pains may have them, those who will not take pains are not to be pitied; they are to be looked on and treated as drones, the pest and disgrace of society."

After discussing the question from various points of view, and combating some objections that might be urged in favour of the Irish peasant, who lacked the facilities possessed by Englishmen of the same class at the period, Berkeley goes on to say:—

"But admitting, for various reasons above alleged, that it is impossible for our cottagers to be rich, yet it is certain they can be clean. Now, bring them to be cleanly, and your work is half done. A little washing, scrubbing, and rubbing bestowed on their persons and houses would introduce a sort of industry; and industry in any one kind is apt to beget it in another."

Here is a picture of squalid beggary and idleness often witnessed in this island, not only in Berkeley's time, but in our own day:—

"It is a shameful thing, and peculiar to this nation, to see lusty vagabonds strolling about the country, and begging without any pretence to beg. Ask them why they do not labour to earn their own livelihood, they will tell you they want employment; offer to employ them, and they shall refuse your offer, or if you get them to work one day, you may be sure not to see them the next. I have known them decline even the lightest labour—that of haymaking,—having at the same time neither clothes for their backs nor food for their bellies. A sore leg is an estate to such a fellow, and this may be easily got and continued with small trouble. Such is their laziness that, rather than work, they will cherish a distemper. This I know to be true, having seen more than one instance wherein the second nature so far prevailed over the first, that sloth was preferred to health. To those heggars who make much of their sores and prolong their diseases, you cannot do a more thankless office than to cure them, except it be to shave their beards, which conciliate a sort of reverence to that order of men."

In our early days we witnessed many of these sturdy beggars hawking their sores and

carrying their well-filled wallets, full of meal and malt. The meal was sold to many poor cottagers and house-keepers, for these chronic beggars of both sexes had their constant customers. There were a class of them who were very dainty as to what they accepted in the way of relief. Before the famine years of 1845-7 some of these lusty beggars did not care to take gratuities in the shape of potatoes or cabbages, particularly if these vegetables were boiled. They would rather have a copper given to them instead, for their wallets were so well filled after their rounds, that the chances were that a portion of the cooked food they received was cast into the roadside ditch. We speak from personal experience of the doings of these lazy but well-fed beggars. A salt or barrelled herring before the famine years stunk in the nostrils of well-to-do town beggars, unless they had a market for such fish. In fact the travelling beggars of past days were chapmen and carriers, and those who suffered real beggary and hunger were generally the poor cottagers, or, to coin a word, the wretched "cabiners," who starved on one meal a day, and whose everyday suit was their Sunday suit, and their constant home all the year round was part hovel and pigstye. Dirt, of course, in such dwellings was almost unavoidable, for if it did not exist behind the door, it did by the fireside; and if not on the bed, it did under it. Ragged children, sore eyes, rickety limbs, a little stock of potatoes and meal, and here and there in other homes a grunting pig, a crowing cock, and a few cackling hens made up the picture. The foreground or the background need scarcely be painted. The walls were bare within; a dunghill stood before the door without, with a pool of coloured water; there was no window in the back of the cabin, for it often was stuck right against a high embankment for shelter; and, if the rain did not find its way through, the dampness did. There were ditches too betimes in front or rear, and a whole pane of glass was a luxury, and where one or more occurred unbroken and no "caubeen" or wisp of straw was thrust thro', a bull's-eye pane gave light to the interior. This is but an outline picture of an Irish cabin and its surroundings in past days; and, we are not quite sure, despite all that is at present talked of improved dwellings for agricultural labourers, that many similar pictures to that which we have drawn are still to be found on the large estates of some of our nobility and rich landed gentry in Ireland.

In his excellent treatise on "Dry Rot in Timber," Mr. Thomas Allen Britton, quoting Mr. W. Papworth's lecture in 1857 on "Fir Deal and House-painting," remarks that house-painting did not come into general use until about the period of William and Mary, and Anne, up to which time either colouring by distemper or by whitewash had been in vogue for plaster work, leaving inside wood work more or less untouched. "We think," says Mr. Britton, "without wishing to think too loud, that house-painting was invented by a bad builder in the seventeenth century, because

Putty and paint cover a multitude of sins."

We think so, too—that is, that putty and paint do cover a great multitude of sins, as do also plaster and wall-paper. As long as house-painting as now practised is necessary, of course putty will be more or less used, and generally a good deal more than is absolutely necessary, or would be necessary if carpenters and joiners put their work together in a workmanlike manner, and builders had it executed with seasonable, sound, and proper materials. Putty too often is the resource of the botch; when bad joints are made, they gape and cry aloud like young birds in a nest for something to stop their mouths and satisfy their swallow. Glue will not long hold together a bad joint, though some joiners are of opinion that "glue and twenty-penny nails would hold the very d—l." We fear much however, that the

nail that would hold his sable majesty will be a long time before it is struck upon the head.

We remember a jobbing carpenter—a "handy man" or jack-of-all-trades—of our juvenile days, who was a firm believer in the virtues and powers of putty. Whether he did not know how to use his tools properly, or did not care to keep them sharpened, or that he was too often dry and needed to wet his job, certain it was his handiwork was generally turned out in a very rough state. He was equal, however, to every emergency of a split, splinter, a bad shoulder, or gaping mitre joint, for his tool-basket always contained a solid lump of plastic putty. Our "chip," being called upon one day by a circuspect maiden lady to make a little work-table, he made it so out of square, and so open in the joints, that it exhausted the whole of his putty to hide the wounds. When he brought his work home, the keen old maiden's eyes detected the state of the suspicious joints, and, in answer to her interrogatory, the case-hardened "chip" replied that there was a little putty in the joints, but that that was the best part of the work. She coolly replied to the rather astonished "handy man" that he had better take his little table home and re-make it "all of putty."

Putty, indeed, independent of paint, covers a multitude of sins; but, with paint, it covers a great many more. To the glazier and painter putty may be indispensable at present; but to the carpenter and joiner who is a skilled workman, and who abjures the "rule of thumb," putty is of no use; and, if used by his fellows of less skill, it bespeaks very often the complete "hotel," though they may be "handy men," "three-branch hands," and "jacks-of-all-trades."

Here are some odd obituaries of somewhat remarkable persons and characters (in continuation of our former notes) who died in this city and elsewhere through the provinces in 1794:—

"April, 1794.—At Waterford, at the very advanced age of 110 years, Mr. Samuel Clayton, formerly an eminent silversmith of the city of Dublin."

In the month of May, same year:—

"At Ranelagh, Alexander English, Esq., formerly known by the appellation of "Buck English," a gentleman whose vicissitudes of fortune have been extremely eccentric. He languished for many years previous to his death in extreme poverty, and died at the crisis of a lawsuit, terminating in his favour, by which an estate of near £2,000 per annum would have been restored to him."

It may be doubted whether, if he lived, poor "Buck English" would know how to keep his money and use it, or whether, if he had only lived a few days longer than he did, the lawyers would not have contrived to prolong his trial, and help to encumber his estate with heavier costs.

In the same month—

"In Cork, at an advanced age, Ignatius Trant, Esq., merchant. His probity and industry had for a number of years been so uniform as to enable him to leave his successors a handsome fortune, with a most respectable character. Of him it may be truly said that he possessed many friends, and never had an enemy."

Happy Trant! you must have lived and died a perfect *rara avis*, for a good man's ill-wishers are in these days as plentiful as blackberries in autumn. Strangely enough—no, perhaps 'tis not so strange—these ill-wishers are willing to pass a vote of condolence to your widow or relatives after your death! How charitable it is on their part to think so highly of your character when you no longer in person stand in their way!

Another death in the same month, and we are done for the present:—

"At Tralee Castle, Co. Kerry, Sir Barry Denny, Bart., representative in Parliament for the said county. He was collaterally descended from the famous Sir Anthony Denny, one of King Henry the Eighth's executors. His estate and title devolved to his eldest son, now Sir Barry Denny, who



will shortly be created peer by the style and title of Baron Dunmore."

Of the same family was the once-noted Lady Arabella Denny, whose philanthropic labours in Dublin in the last century were so well known, who spent many of her years at Blackrock, and who was the foundress of the Magdalen Asylum in Leeson-street in this city. H.

### SANITARY TALK AND WORK IN KINGSTOWN.

At the monthly meeting of the commissioners a report was read by the Town Clerk, Mr. R. J. Ennis, from which it appears the following sanitary work was performed during the previous month:—302 premises inspected, 51 notices served to abate nuisances, 22 nuisances called attention to, 16 summonses for nuisances, 11 nuisances abated by magistrates' orders, and 22 houses limewashed. The death-rate in Kingstown for September was 14 per 1,000 persons. Mr. John Doyle inquired if it were the same people who were repeatedly summoned for nuisances? Alderman O'Rorke said that was so. Mr. Doyle said then these dens should be swept away. Mr. Carroll—And the poor people with them? Mr. Doyle—No; it is in the interest of these poor people I speak. Mr. M'Evoy observed that it was well for the public to know that the principal duty of the sanitary officers consisted in serving sanitary notices on the same set of people. It was stated by several commissioners that a place known as Molloy's-court, off York-street, was in a fearfully disgusting condition. The town surveyor said he was not aware of the locality referred to. Mr. Logan said that was a nice state of affairs, considering the staff of officers they had. Mr. Sullivan remarked that he agreed with Dean Swift, who said that if you kept two servants you cannot get your work done, and if three servants are kept you may do the work yourself. Dr. Roche—In the sanitary staff we have a perfect circumlocution office. There were no less than six persons on the staff. On the motion of Mr. Logan, seconded by Dr. Roche, it was resolved to take immediate action with reference to Molloy's-court. A committee selected from the board was appointed to inspect the sewerage at Sallynoggin, which the surveyor recommended should be repaired at a cost of £20. Mr. Sullivan drew attention to the unfinished condition of a sewer in Milliken's-court. It was, he asserted, a perfect disgrace to the town. The town surveyor said the men who had been doing the work struck work. A committee, consisting of Mr. M'Evoy, Mr. Logan, and Mr. Herron, was appointed to inspect the works mentioned. The town surveyor reported that 2,198 square yards of asphalt had been laid during the month. Sewerage repairs had been made at Monkstown. The surveyor also reported that the township water meter had been out of repair, for some time, and they had to rely on the Corporation meter for their water consumption calculations. Their meter had cost them £130, and was now about to be repaired. Dr. Roche said he had been requested by Mrs. Masterson to contradict statements made at the last meeting of the board to the effect that she was willing to part with her interest in Anglesea Villa in order to furnish a site for the proposed town hall. The chairman read a communication from the Board of Works, which stated that the Lords of the Treasury declined to put in the estimates a sum to be expended on the erection of a dead-house for the use of the township. Mr. Reilly—They might naturally refuse to give us the money: it is a site we want. The subject then dropped. Mr. M'Evoy moved the following resolution, of which he had given notice:—"That in all future advertisements for sewerage contracts the following words be inserted: 'that sealed tenders must be on printed forms, and accompanied by a schedule of the prices at which the amount has been computed,' and that all recommendations in Mr. Cotton's report be carried out." Adopted.

### MILK FROM THE "MILKY WAY."

A FEW days ago a case of milk adulteration came before the magistrates at the Drogheda Petty Sessions. The defendant, James Markey, is certainly a remarkable man, whether his genius is gauged by his simplicity or through what may only be a mask for throwing the mayor and his fellow magistrates off their guard. It is noticeable, too, from an English point of view, if not an Irish one, that a Mr. Simpson, a solicitor, appeared on behalf of the corporation in this watery affair. We must be excused for reminding the Irish reader that in London putting water in the milk is otherwise known as putting "Simpson" in the milk; but in the Drogheda case friend Simpson was on the side of the corporation instead of on that of the dairyman. But for the report:—

Patrick Levins, inspector of nuisances for the Borough of Drogheda, and milk inspector, proceeded against James Markey, Duleek-street, a dairyman, for having on the 13th July sold adulterated milk. From the evidence it appeared that on the day in question Mr. Levins demanded a pennyworth of milk from the defendant; he told Markey what it was required for; sealed up portion of it in a bottle, and put the remainder in another, which he gave to defendant; then handed that which he kept himself to Mr. Greene, borough surveyor, who sent it to Dr. Cameron, borough analyst, and he stated in his report that it was adulterated with 16 per cent. of water.

Mr. Daly—Well, my man, what have you to say to this?

Defendant—Well, nothing, yer honour. It was quite an accident!

Mr. Whitworth—How could that be?

Defendant—Very simple, sir.

Mr. Daly—Did you put water into the milk?

Defendant—No, sir; but it went in of its own accord. The day was a very wet one, and before I could cover the can it used to rain a good deal into it.

Mr. Daly—Then you were spared the trouble of watering it yourself?

Defendant—Indeed, sir, never a drop of water gets into my milk except when it rains.

Mr. Harpur—And I suppose you never take the trouble of holding an umbrella over your can when it does rain.

The defendant was fined 40s. and 10s. costs.

Irish magistrates are wits. Think of asking an Irish dairyman if he held an umbrella over his can or milking pail; and then think, on the other hand, of the rain getting into the vessel by accident. A London milkman, if the above should meet his eyes, may improve upon the Irish method on a rainy day by putting one of his milk cans, by accident, under some of those iron spouts that carry the water off the roofs of houses or the projecting roofs of shops. There was once an Irish peasant brought up for shooting a hare, and when asked what he had to say in his defence he boldly assured his lordship on the bench that it was all an accident, and that the hare "ran across his aim." In the Drogheda dairyman's case the rain ran into his aim. Our contemporary the *Sanitary Record*, like Captain Cuttle, should take a note of the above.

### THE GAS QUESTION IN DUBLIN.

THE capital "occasional paper" issued at the close of last month by Mr. John M'Evoy, hon. secretary of the Citizens' Committee and the Citizens' Gas Committee, has been effective of good, and it has also led to some discussion on the anomalies of the Dublin gas supply. At the meeting of the Corporation on the 8th instant the town clerk read the report of Committee No. 1, submitting further report of the inspector of lighting *re* the proposed reduction of burners in public lamps. As the cost of public lighting is a matter of great interest to the citizens and ratepayers of Dublin, we annex a short summary of the edifying discussion that took place upon the question of the Dublin gas supply, and the inspector of lighting's very suggestive report:—

Alderman Gregg said this, perhaps, required a little explanation. It would be perhaps in the recollection of the council that so far back as March

1877 they passed a resolution adopting the recommendation of No. 1 Committee to reduce the pressure per hour of the public gas burners upon the recommendation of Mr. Conolly, their Inspector of Public Lights, to whom it was suggested he should make some report as to the public lighting, because the Corporation this year were going to enter into new arrangements with the Gas Company. Accordingly Mr. Conolly reported that by doing certain things—such as shutting off the gas from the burners for half-an-hour each day—there would result a saving of £500 a-year, and, also, that if the pressure were reduced from 4 ft. to 3½ ft. per hour that would result in a saving of a sum of £1,200 a-year. This was ultimately recommended and adopted by this council in a resolution. It was then forwarded to the Gas Company, and, as they had heard read there, they received from the secretary of the Gas Company a letter dated April 9th, in which he remonstrated with the council for trying to avoid the terms that had been agreed to with the Gas Company. Since then they had asked to have the question re-considered, and they were told the experiments were made not so much to test the quality of the burners as with a view to economy. He thought it would be well for the council to reconsider the question. The Gas Company had hesitated to do the thing yet. It would involve also a sum of two or three hundred pounds in the changing of the burners, which should be done by the Corporation. This was a report of No. 1 Committee for confirmation. There was no occasion to refer it back. It would be for the council to say whether they thought the citizens were only to get that much light for the price they paid. They were paying an increased rate now, and they would be giving the citizens gas of a much lower illuminating power. Therefore he thought the old plan of lighting, sixteen-candle gas to be consumed at 4 ft. per hour, was the best for all parties. He would therefore beg leave to move that the resolution of the council of March be rescinded, and the former resolution adopted.

Mr. Kernan seconded the resolution.

Mr. Gray thought the report was a highly instructive one. It really contained matter for a deal of consideration. In the first place he objected altogether to the resolution, because it proposed to rescind the former resolution of the council. In the next place he objected to the report, as it contained no recommendation at all. If No. 1 Committee was to have charge of the lighting of the city it should send forward a report containing a recommendation to the council. But he was rather inclined to think that Committee No. 1 did not know what resolution to recommend to the council, and the fact was that their report was such an extraordinary one that he did not wonder at their not recommending anything to the council. Mr. Conolly was a gentleman he very much respected, but he must confess his respect for him had been very greatly lessened by his report. He was then Inspector of Public Lights and he got £300 a-year. He also was brother-in-law to Mr. Cotton, manager to the Gas Company. A tax had been laid on the Corporation to enable Mr. Conolly, Inspector of Public Lights, to check his brother-in-law, Mr. Cotton. A gentleman occupying the particular position of Mr. Conolly should be like Cæsar's wife—above suspicion. He said if Mr. Conolly was not capable of telling them this without experiments he was not worth £300 a-year. In conclusion Mr. Gray moved as an amendment that the report be returned to Committee No. 1 to carry out the recommendation of the council.

Mr. Deunally seconded the proposition.

Mr. Bentley did not understand Mr. Gray's objection that the committee did not recommend anything. The committee had plainly abstained from recommending anything.

Mr. Gray said he would somewhat change the terms of his resolution, and move—"That the report be referred back to Committee No. 1 to report fully, and to show, in a tabular form, the quarterly gas accounts for the last eighteen months, so that the council might be able to judge of the matter."

Mr. Kernan seconded the resolution, which was carried.

The above discussion is indeed an instructive one, and proves the correctness of Mr. John M'Evoy's statements and our own made long since respecting the gas supply and the mutual interest that exists in common and upheld between the Gas Company and the Dublin Corporation. The case for a reduction of the price of gas in Dublin has long since been made out, and without any testing apparatus the eye can at any time plainly discern the illuminating power of the Dublin supply.

The gas monopoly in this city, through the



existence of only one company, cannot last, and is not fated to last. The proprietors of large manufacturing concerns in this city, as well as in cities and towns in the sister kingdom, have begun to study their own interests and manufacture their own gas. This they would not have attempted to do if the Gas Company supplied them even as cheaply as they could manufacture the gas themselves. The starting of a new gas company in Dublin is not only possible but probable, and the difficulties in the way are not great.

We cannot finish our remarks for the present in a more appropriate manner than by giving the concluding sentences in Mr. McEvoy's "occasional paper," which, as a whole, is an able statement of the gas question in Dublin:—

"We cannot better conclude than by quoting the suggestive query we find in the *Journal of Gas Lighting*, the organ of the gas companies of the United Kingdom. In its 'circular to gas companies' of the 25th inst., the journal, after noticing the present prosperity of the Dublin Alliance, its paying 10 per cent., and carrying forward £8,277, adds:—'Surely the day cannot be distant when the directors will see their way to make a further reduction in the price of gas. Curious, is it not, that this prudent adviser of the gas monopoly should be in advance of the people's Corporation of Dublin—the guardians! of our public interests—in suggesting a concession to the Dublin public.'"

#### GLASNEVIN AND DRUMCONDRA DRAINAGE SCHEMES.

MR. P. F. Leonard has laid before the guardians of the North Dublin Union an amended drainage plan for the above districts. Our readers are aware that some objections were made to his first scheme, particularly as to the outfall. We print below an extract from his second report on the scheme, which has been sent forward to the Local Government Board:—

That scheme may be briefly described as an extensive system of main drainage, the various sewers of which would gather on their way the sewage of every inhabited portion of the two districts. I proposed that the two main drains of the northern and southern districts should converge at the southern end of Ballybough-bridge, from whence I proposed conveying their united contents in an egg-shaped sewer, to a point one thousand feet east of the railway bridge at East-wall, discharging into tidal waters. To this outfall exception has been taken, on the ground that it might injuriously affect the neighbourhood of Clontarf by polluting the foreshore. This is certainly a matter of the most serious importance, and one which the people of Clontarf have a right to expect shall be treated with the greatest deliberation and caution. When preparing my scheme I was fully alive to the difficulties of the case, and before deciding on the point of outfall I carried out a series of experiments which satisfied me at the time that the people of Clontarf would not suffer. It must be borne in mind that at the present moment the great bulk of the sewage which I proposed discharging at the point of outfall finds its way into the Tolka, half a mile further up stream, with the inevitable result that after passing through Annesley Bridge it is joined by the sewage of Fairview and Marino Crescent, and is drifted about and distributed over the slob land which lies west of the Great Northern Railway, except such small portions of it as can escape through the imperfect outlets which the railway arches afford. The consequence is that at low water the smell in the immediate neighbourhood is extremely offensive. This unsatisfactory state of things would be remedied by my scheme, so far as being relieved from the sewage of Glasnevin and Drumcondra is concerned. As to the probable increase of the population, I certainly looked forward to some scheme of main drainage for Dublin being carried out before such an increase would become a matter of serious consequence, and of which scheme I intended mine should form a part; therefore it was that I hesitated to involve the ratepayers in a larger outlay than I considered at the time absolutely necessary. As the Corporation of Dublin, however, shows no sign of moving in the matter of main drainage, which, indeed, so far as appearances indicate, would seem to be indefinitely postponed, I think it would be better to shift the position of the outfall, as originally proposed by me, to the point shown on the accompanying plan, and known as the "Smoothing Iron," thus removing any cause of

complaint, as at this point the estuary is three-quarters of an English mile in width; the race of the tide is very rapid, in addition to which we have the constant scour of the river Tolka; and, at the point of discharge, there is always deep water. I may here observe that I have carefully examined the entire of the foreshores of this estuary, commencing at the "Smoothing Iron," and ending at the entrance to the North Bull Wall, and the result has satisfied me that no part of the sewage which I purpose dealing with can possibly reach the foreshore of Clontarf. That foreshore, I must say, is at the present moment in a very unsatisfactory condition, but this I attribute mainly to the fact, that between a point opposite to Fairview-avenue and a point opposite Belvidere, in the townland of Greenlawn, no less than 26 sewers, varying in size from 6 in. by 12 in. to 4 ft. by 2 ft., discharge direct on the foreshore; and at one of the slips along the Clontarf Road, there is an accumulation of filthy refuse which is most offensive. The additional cost of the extension of outfall sewer which I now propose, will be about £1,000, bringing the total cost of works up to £5,899 18s. 3d., or, adding the usual 10 per cent. [on the £1,000, we suppose], to meet contingencies, say £6,000, necessitating the striking of a rate of 4½d. in the pound on the present valuation, to repay the cost of works. With reference to this matter of cost, however, I think the Corporation of Dublin should be asked to join in the expense of making the sewer from Ballybough Bridge to the point of outfall; and also a certain proportion of the cost of so much of the Clontarf-road sewer as lies between Jones's-road and Ballybough Bridge. Both these sewers will be available for city drainage purposes, the former in particular, carrying to sea a vast quantity of city sewage, which at present discharges at Ballybough Bridge. If such an arrangement can be come to, and I see no reason why there should not, it will be a matter of benefit to all parties, both in a financial and sanitary point of view. With regard to the important question of taxation, I mentioned in my former report that, as nearly as I could ascertain, the fairly assessable property was then valued at £13,576; since that time, however, building operations have been steadily progressing, and I think I am fairly within the mark in stating that during the past twelve months over eighty houses have been built, and I am aware that arrangements are being made for the laying out of new roads and avenues, affording sites for upwards of 300 additional houses. It is therefore clear that the present value must be largely in excess of that of last year, and that there is every probability of a still further increase; thus, year by year, reducing the burden of taxation to a minimum.

#### THE LITERATURE OF TRADES UNIONISM.

We have before us, in pamphlet form, respectively the "Report of the Tenth Annual Trades Union Congress" held last month at Leicester, and the "Parliamentary Committee's Report, 1876-7." The first is a carefully prepared report of the proceedings of the Congress, the papers read, the discussions that ensued on import trade and kindred public questions, together with an amount of other information of a practical business nature, connected with trade organizations, and the central and guiding body in particular. An Appendix is added to the report of the Congress, containing the able address of Mr. Thomas Brassey, M.P. This paper deserves to be read both by employers as well as workmen, for it deals from the speaker's point of view fairly by both. The "Parliamentary Committee's Report" is an instructive one, and very suggestive. It is at once a report of work done in the past, work in process of being done, and a programme of work mapped out for the future. The literature of labour was never better represented than it has been in the reports before us. Though we may not agree, or are not called upon to agree, with the whole of the programme or the whole of the utterings of Trade Unionism, we are free to honestly acknowledge that the literature and the spirit manifested in the pages before us is creditable alike to workmen and the nation. The Leicester Congress on the whole was remarkably successful. The London and provincial press, notwithstanding the War and the Eastern Question, and other questions, gave in several instances fair though much abridged reports. Irish artisans we

think might profit and learn much that would be useful to know by procuring copies of the reports under notice, which they can readily do at a very small cost by communicating with Mr. Henry Broadhurst, the secretary of the Parliamentary Committee, at the rooms of the Labour Representation League, 27 Villiers-street, Strand, London. *En passant*, elsewhere in our pages to-day we have touched upon other phases of the Labour question, past, present, and future.

#### NOTES OF WORKS.

New meeting rooms, offices, &c., for the Society of Friends, Eustace-street, are being erected at a cost of £4,000. Messrs. Millar and Symes, architects; Messrs. J. and W. Beckett contractors.

A mansion for Mr. Jameson, to cost £2,000, is being erected at Bray, County Wicklow. Same architects and builders.

Extensive additions are being made to the Adelaide Hospital, Peter-street—Madeline wing, theatre, fever hospital, &c., according to plans by Mr. J. H. Bridgford. Messrs. J. and W. Beckett are the contractors.

The Queen's Theatre—portions of which had, we hear, been pronounced as unsafe for the public—is being once more "restored" and decorated for a new opening. The carpentry work is being executed by Mr. Luke Doyle; the decoration by Messrs. Aungier and Sons.

Messrs. Gahan and Son have been declared contractors for the new Christian Union Buildings, Lower Abbey-street, the foundation stone of which will be laid to-morrow (16th). Mr. A. G. Jones is the architect.

#### VITAL STATISTICS.

THE deaths registered in the Dublin Registration District during the week ending 6th October, 1877, represent an annual mortality of 25·3 in every 1,000 of the population, by the Census of 1871. In London the death-rate was 19·3 in every 1,000 of the estimated population; in Glasgow 21·7, and in Edinburgh 14·7. The number of deaths from zymotic diseases registered is 29. The deaths from these diseases include 2 from fever (both typhus cases) 5 from scarlet fever, 4 from measles, 4 from whooping-cough, only 3 from diarrhoea, against an average of 10·6 for the corresponding week, 2 from croup, 1 from quinsy, &c. Eleven children died from convulsions. The deaths from bronchitis amount to 28; 2 deaths were attributed to pneumonia or inflammation of the lungs, and 3 to lung disease unspecified. Heart disease proved fatal in 7 instances, aneurism in 1; apoplexy in 3, cephalitis or inflammation of the brain and its membranes, paralysis, and brain disease unspecified each in 2; jaundice in 1, liver disease unspecified in 4, and cystitis or inflammation of the bladder in 1. Phthisis or pulmonary consumption caused 13 deaths, hydrocephalus or water on the brain 5, mesenteric disease 3, scrofula 1, and cancer 2. Four accidental deaths, 1 case of homicide, and 1 of suicide were registered during the week. Fifty-six of the persons whose deaths were registered during the week were under 5 years of age (28 being infants under 1 year old); and 36 were aged 60 and upwards, including 17 persons aged 70 and upwards, of whom 4 were octogenarians.

#### AUCTIONS OF WOOD GOODS.

By announcement in our front page it will be seen that on Thursday next Messrs. John Martin and Son will offer for sale a large stock of wood goods at their stores, North Wall, well worthy of the attention of the trade at this season.

On Friday next, at the North Carriers' Dock, Liverpool, Messrs. Farnworth and Jardine will submit to competition, a miscellaneous stock of mahogany, cedars and fancy woods. See advertisement in front page.



## HOME AND FOREIGN NOTES.

At Breslau a successful attempt has been made to erect a paper chimney about 50 ft. in height. We are told that by some chemical preparation the paper was rendered impervious to the action of either fire or water!

The ninth course of lectures on "The Historical Development of Art," with general reference to Architecture, Sculpture, &c., was commenced by Dr. G. G. Zertli on the 9th inst. at the Lecture Theatre, Science and Art Department, South Kensington.

**A JOLLY MESS.**—Fourteen thousand letters from Europe have been received at New York on the steamer Særia in a frightful condition. The heat of the boilers had melted the wax seals, sticking them together.

**THE BRITISH ASSOCIATION IN DUBLIN.**—Dr. A. Macalister has undertaken the editing of the "Guide Book," proposed to be published for the information of those who may attend the meeting of the British Association in this city next August. The executive committee meet again tomorrow to make further arrangements.

Our gas company had better look alive. The electric light placed in front of the Nouvelle Opera in Paris was a success, and now an electric hand-lamp has been patented, partially electric, partly benzoline. It gives a very brilliant light, and is very rapidly set in flame. We are evidently not far off the discovery of a means whereby we can get rid of meters that register too much, pipes which leak, and burners which will not display a flame. In a few years every man shall be his own flame manufacturer. We shall touch a spring and be dazzled in a moment by the brilliancy of sunlight.

**FAMOUS BELLS.**—The great bell at Moscow, Tzar Kolokol, which, according to the inscription, was cast in 1733, was in the earth 103 years, and was raised by the Emperor Nicholas in 1836. The present bell seems never to have been actually hung or rung, having cracked in the furnace. Photographs of it are now common, as it stands on a raised platform in the middle of a square. It is used as a chapel. It weighs about 440,000 lbs.; height, 10 ft. 3 in.; circumference, 60 ft. 9 in.; thickness, 2 ft.; weight of broken piece, 11 tons. The second Moscow bell, the largest in the world in actual use, weighs 128 tons. The great bell at Peking weighs 53 tons; Nanking, 22 tons; Olmutz, 17 tons; Vienna (1711), 17 tons; Notre Dame (1680), 17 tons; Erfurt, one of the finest bell-metal, 13 tons; Great Peter, York Minster, which cost £2,000 in 1845, 10 tons; St. Paul's, 5 tons; Great Tom at Oxford, 7 tons; Great Tom at Lincoln, 5 tons; Big Ben, of the Westminster clock tower (cracked), weighs between 13 and 14 tons; it was cast by George Mears, under the direction of Edward Beckett Denison, in 1858; its four quarters were cast by Warren, in 1856. The Kaiserglocke, of Cologne Cathedral, lately recast (1875), weighs 25 tons.—*Ene. Brit.*

**THOMSON'S SOUNDING APPARATUS.**—A new and ingenious application of chemistry to the purposes of navigation, the invention of Professor Sir William Thomson, has been tried with perfect success on board the *Minotaur*, Capt. Lord Walter Kerr, the flagship of Admiral Beauchamp Seymour, commanding the Channel Squadron. It is notorious that had the *Schiller*, German emigrant vessel, which was wrecked against the Scilly Islands a few years ago, kept the lead going at night she would in all human probability have reached her destination in safety. Many accidents which occur to our mercantile marine are traceable to the same want of care in ascertaining the whereabouts of a ship in the dark or during a fog by soundings. This neglect of ordinary precaution is entirely due to the cumbrousness which attends the working of the present apparatus on board. It is evident that the use of a weighted line while the ship is under way would not only be of no value, but would prove a positive source of error, seeing that by the time the lead touched the bottom the ship itself would be a considerable distance ahead. In these circumstances the length of line run out would afford a most misleading test of the depth of the water. What is wanted in dangerous channels or when a ship is approaching the land at night is a means of ascertaining the actual vertical depth of water under a ship's keel, and until Sir William Thomson's system this could only be accomplished by shortening sail and heaving the vessel to until a sounding had been taken. This process involved immense labour and loss of time, and captains were very reluctant to keep stopping the way of a ship

for periodical soundings. They either did not take them at all or were content to drop the lead at very wide intervals. The advantages of Sir William Thomson's method consists in the fact that it is simple in operation and that it can be performed in all weathers without interfering with the speed of a ship. Its absolute accuracy, too, has been established by Lord Walter Kerr, during the recent cruise of the *Minotaur*, by cross bearings and by dropping the instrument in waters the depth of which is well known. The apparatus consists of an ordinary sounding-bar attached to a line of fine steel wire. The wire is run off a drum by means of the weight when thrown overboard, the rapidity of the paying out being controlled by a rope strap brake fitted to the drum, and by means of which the line is also stopped the moment the bottom is touched. So far the principle is the same as that of the ordinary sounding apparatus, and although the outrunning line is made to actuate an index hand and measure its own length, the result would, if Sir William Thomson's method ended here, be no more trustworthy than similar results obtained by the common sounding line under way. But in the new gear the inventor has attached a small copper tube about 2 ft. in length to the bottom of the wire line near the bar. Into this tube, which is hermetically closed at the bottom, a little sulphate of iron is poured, after which an attenuated glass tube, hermetically sealed at the top, is introduced, and to which the water is freely admitted through the cap of the outer tube. As the interior of the glass tube is coated with a solution of prussiate of potash, the moment it is thrown into the sea the water presses the sulphate of iron into it and discolours the glass, the height of the discolouration being regulated by the pressure of the water. Hence as the measure varies at various depths, all that is required to be done to ascertain the depth of the soundings is to measure by a scale the extent of the discolouration. Two men suffice to manipulate the drum on the poop of the *Minotaur*, and both Admiral Seymour and Captain Lord Walter Kerr are warm in their commendation of the absolute accuracy and extreme handiness of the instrument. Its importance on board our mercantile marine cannot be overrated.

## TO CORRESPONDENTS.

**DRUMCONRA AND GLASNEVIN DRAINAGE.**—We expressed our opinions pretty fully months ago on both schemes, and perhaps too plainly to please all parties. Difficulties stand in the way of both schemes in dealing with the sewage. As much as we are in favour of irrigation schemes and the utilisation of sewage, we are of opinion that, viewing the present position of the two districts and with a view to the possible future outcome, Mr. Leonard's scheme, despite some drawbacks, is the preferable one of the two.

**ANTIQUARY.**—Several of the books you inquire about will be found in the catalogue of stock of late W. B. Kelly, now being brought under the hammer by Mr. John F. Jones, auctioneer. Original editions of "Ware's" "Antiquities of Ireland," and Harris's "Ware" are still procurable. Write to Mr. Traynor, Essex-quay, or Mr. John O'Daly, Anglesea-street.

**A CARPENTER.**—The works by some recent American authors on carpentry and joinery, including stair-building and hand-railing are preferable to the standard English works on this subject. Price, Pain, and Nicholson, are certainly superseded in many points by Riddell's "Practical Carpenter and Joiner," and his "New Elements of Hand-railing." The card-board models of the latter author are accurate to a point, and as "plain as a pickstaff."

**RECEIVED.**—W. B. C.—A Builder's Foreman (see answer above)—Surveyor (yes)—A Ratpayer (do.)—T. S.—T. C.—M. A.—H. B.—F. I.—J. S., &c.

## NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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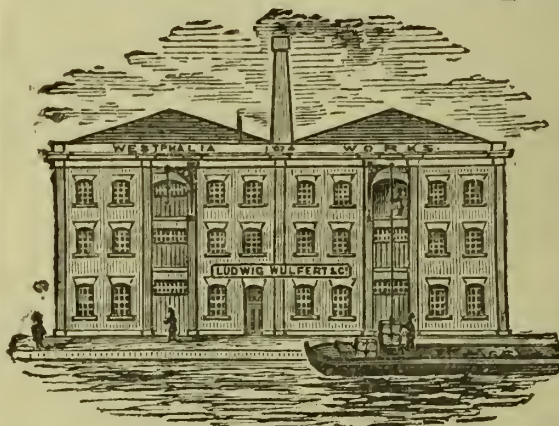
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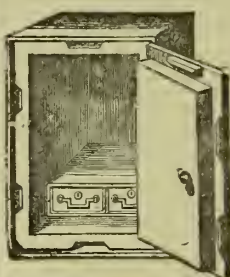
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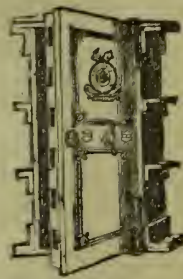
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THE IRISH BUILDER.

VOL. XIX.—No. 429.

THE PROPOSED  
SCIENCE AND ART MUSEUM,  
AND LEINSTER LAWN.



HAVING upon previous occasions spoken openly and honestly, according to our light, anent the defects of the Government scheme, and the conditions under which it was to be carried out, we have no hesitation now in expressing our opi-

nions relative to the threatened encroachment upon Leinster Lawn. It is obvious at a first glance, looking at the plan or looking upon the ground without a plan, that Leinster Lawn as an open space cannot be improved by the erection of the proposed Government buildings thereon. A good and ornate building is possible, if not probable; but even presupposing the new building, as an architectural design, were all that could be desired, Leinster Lawn will of necessity have to be sacrificed if it be erected on the contemplated site facing Merrion-square. As we desire to discuss the question in an impartial manner, we give the memorandum which was communicated some days ago to the Press:—

"It is intended to build a highly ornamental structure between the ends of the two buildings on Leinster Lawn, with a large archway in the centre, through which may be seen the Prince Consort memorial and the ornamental grounds which it is fully intended to maintain as a flower garden for the use of the public as heretofore [only that the site would be otherwise occupied]. Let it be supposed

that a building somewhat like Burlington House, only more extended, were erected in that situation, some idea may be formed of the magnificent effect it would produce in so fine a position. It is to be borne in mind that unless Government can be induced to erect the building on this site, they will be forced to place it on the agricultural premises fronting Kildare-street, which, in addition to its not being sufficiently large for the purpose, cannot be used for the purposes of an Agricultural Museum with accommodation for a loan collection of agricultural implements, which would be a most important department in the institution."

The question of Leinster Lawn and its preservation as an open space suggests other cognate questions which have been lost sight of in the public discussion that has taken place. Before proceeding to notice one or two matters in connection, we will give Lord Monck's letter, as it states fairly and calmly several points which must be admitted by those who advocate the Government plan and site of the proposed Museum:—

"I hope it is not too late to obtain a reconsideration of the plan for erecting the new Museum of Science upon the garden in Leinster Lawn. I have reason to know that the scheme has been entertained, if not decided on, by the authorities responsible for the matter, and I desire to draw the attention of the citizens of Dublin to the subject before the proposal shall have become an accomplished fact. I wish to point out that the garden has become, under its recent management, one of the most attractive bits of scenery in Dublin. It is the only place, as far as I know, within the city, where the poorer classes have the opportunity of seeing flower-growing carried on. It is open to the public, without restriction, during the whole day. From the fact that it is already surrounded by high buildings on three sides, it is obvious that, if the fourth side be also filled up, though there might be space, there could be neither light nor climate suitable for a garden. No one, I suppose, will deny the civilising influences which access to gardens such as this bring to bear on the people, and I do not wish to be understood as undervaluing, in any sense, the advantages to be derived from the proposed Museum. There is no necessity for any comparison or antagonism between the garden and the Museum. There is no reason why we should not have both. There is ample and suitable space for the Museum on the premises of the Royal Dublin Society, or on adjacent ground which could be easily acquired without encroaching on Leinster Lawn garden. I have spoken on the subject since I became aware of the intention of building on this site to many citizens of all classes, and I can safely say that I cannot meet anyone who is in favour of the project. I feel quite certain that those who have the management of the matter desire only to do what is best for and most agreeable to the public; and if the voice of the citizens be unanimous, as I believe it to be, against placing any building on Leinster Lawn, it is only necessary that the Government should be made aware of that fact to ensure the abandonment of the scheme. If, however, neither the citizens, through their representatives, nor the Press, as the organ of public opinion, take up the subject, the Government may very fairly say that they are free to act as seems best to them in the matter. I should hope that no such apathy will be found to exist, but that the Press and people of Dublin will show by their conduct in this case that they recognise the duty of protecting the ornaments of their city, and that they desire to secure for all classes free access to those gratifications which the contemplation of the beauties of nature, in their most attractive form, is calculated to afford."

Now, a highly ornamental structure, if good in plan and arrangement, would unquestionably be an architectural improvement to be desiderated, even if erected on Leinster Lawn. At the same time, if it can be shown that available space exists elsewhere on the old Dublin Society's grounds, for the erection of the new buildings, we are ready to declare in favour of the latter, and, as a consequence, for the preservation of the open space in front of Merrion-square. Our memories of Leinster Lawn extend back for many years—years before the Dargan Exhibition building was thought of, when the Merrion-square side of the Lawn was bounded by a dwarf wall, and a sunk fosse

with grassy sides. There were many trees, and a beautiful green sward, and no building interrupted the view of the palatial family mansion of the Fitzgeralds. As an open space the Lawn of the Royal Dublin Society house for several years was fairly kept in order, but it was exclusive, like all the squares of Dublin, the poor and the working classes not having a free admission. There was some compensation, however, in the sight, and we would have preferred never seeing the Dargan temporary building erected upon the Lawn, or the later permanent buildings that now occupy a large portion of the original space. We know thoroughly well the sentiment that is actuating a large portion of those who are at present opposed to erecting the contemplated building in front of Leinster Lawn—to be plain, it emanates more from the gentry element than the industrial element, and the intended encroachment is, no doubt, more annoying to a certain portion of the former than the latter.

We have preached for long years in these columns the preservation of open spaces, the opening of our public squares, and the public health question in connection therewith and apart, and therefore it cannot be surmised that we are interested in the smallest way in seeing any open space, no matter how limited in extent, filched away from our citizens. It is lucky, however, even if the Government was not moved by the public remonstrances to alter their plan, and that the South Kensington Department succeeded in their desire in seeing the Burlington House copy with its archway erected on the Lawn, that the loss entailed would not be as grievous to our citizens as it would seem at first sight. The close proximity of Merrion-square to Leinster Lawn suggests a public concession, and also an improvement on the plan, or in connection with the plan of the new buildings. Merrion-square, as well as Stephen's-green, will have to be thrown open to the general public sooner or later, and as an open space it is susceptible to considerable improvements in a gardening and a variety of other ways.

Let us suppose for a moment that Leinster Lawn was occupied by the contemplated building, could not the Lawn and the Square be connected by an arched passage under the street? It could be so constructed that there would be plenty of light; the depth below the surface of the street might be small so that the entrance to the passage from either side would only necessitate a gentle incline. Apart altogether from the building in front of Leinster Lawn, an arched passage between the present open Lawn and Merrion-square would be an improvement. The communication between the open spaces on either side of the street would be most useful in the event of Merrion-square being thrown open in course of time to the general public. Other benefits will suggest themselves, and modifications of the plan by which the communication could be carried out.

We would say to those among the nobility and gentry who are strenuously advocating the preservation of Leinster Lawn and its present open view: "Messieurs, join issue with the citizens at large and the working classes, and go in for the free opening of Merrion-square." If this proposition is heartily supported by the gentry and residents of Merrion-square, we will believe in the earnestness of those of the nobility and gentry who are



erying aloud, and with some cause, for the preservation of Leinster Lawn for the people.

On the Museum scheme *per se* and the proposed amalgamation of two of our oldest native institutions, our readers are aware that months ago we discussed the question in all its bearings. As the case stands at present, the new arrangement has its inherent defects as well as the original Lord Sandon scheme. We went in for an independent National institution, and we still go in for it, and not one entirely controlled from South Kensington; but it is strange—passing strange, indeed—that many of those who are dancing around the Leinster Lawn encroachment, and acting the sentimental patriot, find it convenient to ignore the major question of South Kensington centralisation and control. Institutions which are governed from outside the country by strangers must be always so, and of little benefit. A large ornamental staff is next to useless, and when they have no native sympathies, the national interest is sacrificed to the personal. An Irish Museum of Science and Art needs to be a practical entity, worked in the interest of the people of this country, and particularly the rising generation, and not an institution got up in the interest of a section, and that section the chief salaried officers. Art and science is certain to pine eventually under such a system where national or native born instinct is ostracised or ignored, and the indigenous creation is replaced by a changeling.

The destruction of Leinster Lawn is a matter of small moment compared with the greater evils we indicate now, and forecasted before; for the preservation of a small Lawn, in the vicinity of a much larger open space, though it may satisfy the minds of a few hundreds of people, it will not satisfy a nation as a compensating balance for the loss of that autonomy which this country, if not legislatively, at least in her own behalf exercised through her time-honoured institutions *adscriptus glebe*.

#### NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

##### NINTH PART.

In our last paper we dealt at some length with the subject of the law of literary property or copyright in Ireland towards the close of the eighteenth century. Earlier in the same century we might have pointed out the grievances and injustice that native authors and Irish printers, booksellers, and publishers laboured under. As Swift's works and his dealings with his printer and publisher, Faulkner, afford some pertinent illustrations of the law, or rather the want of law, to protect authors' and publishers' rights in this country, we will again return to the subject, for the purpose of showing the rank injustice the printing and publishing trade of this country suffered at the hands of the English legislature.

George Faulkner exhibited great energy and enterprise throughout his life, not only in printing the works of Swift and other native writers, but in printing and projecting editions of popular English and foreign authors. We have already shown that he excited the jealousy of the London publishers and booksellers, and even some of his own brethren in the trade. Swift, who acted as a counsellor and friend to his printer, was often consulted by the latter when he felt his rights were invaded and his interests injured by piratical printers in Dublin or London. Benjamin Motte, a noted London

bookseller, filed a bill in chancery in England against Faulkner for printing Swift's works, to stop the sale of them there. The following letter, dated Dublin, May 25th, 1736, was addressed by Swift to Motte, remonstrating with him for his harsh conduct towards Faulkner. Throughout the letter it will be seen that the dean administers some hard knocks, not alone to the London bookseller, but to the government of the day, that permitted such a one-sided law to exist:—

"SIR,—I lately received a long letter from Mr. Faulkner, grievously complaining upon several articles of ill-treatment he had met with from you, and of the many advantageous offers he had made you, with none of which you thought fit to comply. I am not qualified to judge in the fact, having heard but one side; only one thing I know, that the cruel oppressions of this kingdom of England are not to be borne. You send what books you please hither, and the booksellers here can send nothing to you that is written here. As this is absolute oppression, if I were a bookseller in this town I would use all the safe means to reprint London books, and run them to any town in England that I could, because whoever neither offends the laws of God or the country he liveth in, committeth no sin. It was the fault of you and other booksellers, who printed anything supposed to be mine, that you did not agree with each other to print them together, if you thought they would sell to any advantage. I believe I told you long ago that Mr. Faulkner came to me and told me his intention to print everything that his friends told him they thought to be mine, and that I was discontented at it; but when he urged that some other bookseller would do it, and that he would take the advice of my friends, and leave out what I pleased to order him, I said no more, but that I was sorry it should be done here. But I am so incensed against the oppression from England, and have so little regard to the laws they make, that I do, as a clergyman, encourage the merchants both to export wool and woollen manufactures to any country in Europe, or anywhere else, and conceal it from the custom house officers as I would hide my purse from a highwayman if he came to rob me on the road, although England had made a law to the contrary; and so I would encourage our booksellers here to sell your authors' books printed here, and send them to all the towns in England, if I could do it with safety and profit, because (I repeat it) it is no offence against God or the laws of the country I live in. Mr. Faulkner hath dealt so fairly with me that I have a great opinion of his honesty, although I never dealt with him as a printer or bookseller; but since my friends told me those things called mine would certainly be printed by some hedge bookseller, I was forced to be passive in the matter. I have some things which I shall leave my executors to publish after my decease, and I have directed they shall be printed in London. For except small papers and some treatises writ for the use of this kingdom, I always had those of any importance published in London, as you well know. For my own part, although I have no power anywhere, I will do the best offices I can to countenance Mr. Faulkner. For although I was not at all pleased to have that collection printed here, yet none of my friends advised me to be angry with him, although if they had been printed in London by you and your partners, perhaps I might have pretended to some little profit. Whoever may have the hazard or advantage of what I shall leave to be printed in London after my decease, I will leave no other copies of them here; but if Mr. Faulkner should get the first printed copy and reprint it here, and send his copies to England, I think he would do as right as you London booksellers who load us with yours. If I live but a few years, I believe I shall publish some things that I think are important; but they shall be printed in London, although Mr. Faulkner were my brother. I have been very tedious in telling you my thoughts on this matter, and so I remain," &c.

Swift's remarks as to hiding his purse from a highwayman, and his encouragement to Dublin booksellers to reprint books here, and send them to all the towns in England, was not very pleasing to the London trade. In one of the London editions of Swift's works the following note is appended in reference to Swift's advice:—"This we apprehend is better patriotism than good casuistry; but perhaps we are too prejudiced in our turns by the Dean's own principle."—*The English Booksellers*.

The works which Swift alluded to that should be left with his executors to publish after his decease were said to be his "Directions to Servants," and the "History of last

Session of Queen Anne and of the Peace of Utrecht," both of which, we believe, were first printed in London. Faulkner, nevertheless, printed and reprinted several of Swift's productions, and, let us repeat again, in the words of Sir Walter Scott, "Faulkner was the first who had the honour of giving to the world a collected and uniform edition of this distinguished English classic."

In Swift's letter to Sir Charles Wogan, written about the year 1731, occur some remarks, which, as they have a bearing upon our subject, we will quote here:—

"Your directions about publishing the epistle and poetry will be a point of some difficulty. Dublin booksellers have not the least notion of paying for a copy. Sometimes things are printed here by subscription, but they go on so heavily that few or none make it turn to account. In London it is otherwise; but even there the authors must be in vogue, or, if not known, be discovered by the style; or the work must be something that hits the taste of the public; or what is recommended by the presiding men of genius."

In the postscript to this letter Swift mentions the following Dublin editions of English works:—Dr. Young's "Satires," Gay's works, Pope's works, Pope's "Dunciad," Gay's "Fables," "Art of Politicks," and some other trifles in verse which he proposed forwarding to his correspondent. Pope writes to Swift in 1735-6 about Faulkner's intention of publishing his (Pope's) works:—

"As to his design about my works, I beg you will desire him to postpone it until he sees the duodecimo edition of them here with the first volume published by Lintot, for that joined to the rest by Gillever [Lawton Gillever, a London bookseller], will make the completest hitherto extant, and is revised by me. I guess they will be out about Christmas."

Swift, in his "Rhapsody on Poetry," written in 1733, alluded to publishing; and Lintot, the publisher, alluded to Pope's letter:—

"Your poem in its modish dress,  
Correctly fitted for the press,  
Convey by penny post to Lintot;  
But let no friend alive look into 't.  
If Lintot thinks 'twill quit the cost,  
You need not fear your labour lost;  
And how agreeably surpris'd  
Are you to see it advertis'd.  
The hawkers shows you are in print  
As fresh as farthings from the mint—  
The product of your toil and sweating,  
A bastard of your own begetting."

As we have retraced our steps in this paper to give some further illustrations of printing and publishing in connection with Swift and his time, we will make a few more passing remarks on Faulkner, notwithstanding that we have already pretty fully treated of his life and printing and publishing associations. It was in a letter of introduction to the Earl of Oxford, written by Swift, that Faulkner was first described "The Prince of Dublin Printers." This letter bears date Dublin, February 16th, 1733, and opens thus:—

"The bearer, Mr. Faulkner, the prince of Dublin printers, will have the honour to deliver you this. He tells me your lordship was so gracious as to admit him into your presence and receive him with great condescension, which encouraged him to hope for the same favour again, by my mediation which I could not refuse. Although for his own profit he is engaged in a work that very much discontents me, yet I would rather have it fall into his hands than any other on this side."

The letter of introduction given to Faulkner for presentation to his grace the Lord Archbishop of Cashel (Dr. Theophilus Bolton), bearing date, Dublin, August 14th, 1735, Swift again expresses a high opinion of the Dublin printer, humorously describes his characteristics and desires him to bring back certain information. As the letter is not long, and as it is interesting we will give it entire:—

"The bearer, Mr. Faulkner, our famous printer, goes in an hour to Kilkenny and Cashel to gather up his country debts. Ten to one your grace may owe him a dozen shillings, and your town coffee house (if you have one) a dozen more. But his pretences to me for writing are the honour of being admitted to your grace by a line from my hand. I am not in fear of his shaming me as others have done; however, I would not have you leave your manuscripts about the room, for he would be terribly



tempted to beg them, and return them back next winter in four volumes, as he served me; although I never let him touch or see one. He has the name of an honest man, and hath good sense and behaviour. I have ordered him to mark narrowly whatever you are doing as a prelate, an architect, a country gentleman, a politician, and an improver, and to bring me a faithful account when he returns; but chiefly about your health, and what exercise you make use of to increase or preserve it. But he is in haste to be gone, and I'm forced to conclude."

A somewhat similar letter on the same day was written by Swift to be presented to Lord Howth, in which the bearer, Faulkner, is described "as an honest man and the chief printer; and that I know him and treat him with indulgence because I cannot help it. For although he printed what I never would have done, yet he got the consent of my friends, and so I shall get nothing by being angry with him."

Many printers in Dublin profited and suffered by printing the patriotic tracts and verses of Swift. The Dean of St. Patrick's was not obliged in Dublin to write for bread, but he was the means of putting bread into many a poor printer's mouth, though the severity of the law afterwards took it out of their mouths. Copyright was not understood in Swift's earlier time in Ireland, and booksellers here, as Swift himself remarked, had not the least notion of paying for copy. Although nearly a century and a-half has passed since then, unfortunately we have still many London and Dublin publishers and booksellers who have not the least notion of paying an author for his copy. Down till near the close of the eighteenth century in Ireland there was but little market for literary labour in Dublin on the part of those who were obliged to live by their pens, unless those persons were themselves owners of journals or periodicals, or were otherwise subsidized to write in some party interest.

We have mentioned in the course of our papers several journals and magazines previous to 1800, but few of the former were prosperous or long-lived, and none of the latter exceeded a few yearly volumes. These young writers, then, who took to literature in Dublin for a livelihood were obliged in a short time to pass over to London. Want drove some of them over the channel, and misfortune and offences others. Poets, artists, engravers, musicians, and other professionals at intervals followed suit. In fact journalism and periodical literature, such as it existed down to the close of the last century and for a portion of the present century was the rampant literature of the dominant party, save in a few instances at intervals.

During the era of the Irish Parliament three creditable monthly representatives of periodical literature were published in Dublin:—Walker's *Hibernian Magazine*, the *Sentimental and Masonic Magazine*, and the *Anthologia Hibernica*, a monthly collection of science, belles-lettres, and history. The first-named magazine, however, was in existence several years before the Parliamentary era, the first number of it having been published in 1771. The *Sentimental and Masonic Magazine* commenced in 1792, and continued till 1794; and the *Anthologia Hibernica* existed exactly two years, commencing in January, 1793, and ending in December, 1794. It is now generally to be found in our libraries, bound in four half-yearly volumes. The *Anthologia* has become a somewhat historical and more than ordinarily noted publication from several causes, some of which will appear as we proceed. It was commenced as a purely literary magazine, disclaiming and eschewing religious or political discussions, yet after a while some of its writers indulged a little of their political, party, and religious views. The magazine was the outcome of antiquarian controversies, and was established as the organ of the discontented antiquarian section, headed by the Rev. Edward Ledwich, who had seceded from the *Collectanea*, edited by General Vallancy, the antiquary. An extract from the "advertisement" to the first

volume of the *Anthologia* will show the views entertained by its conductors:—

"They conceived that the improved state of civility and knowledge in Ireland called for a publication better adapted to the learned and polished part of the community than has hitherto appeared. They reflected that an insipid novel or ludicrous story might satisfy those whose education fitted them for no higher intellectual enjoyment; but that the scholar and man of taste could receive pleasure only from science, the belles-lettres, and history, for these include every branch of useful and ornamental learning. They determined that religious or political disputes should never find a place in their pages, nor that the *Anthologia* should ever become the organ of any sect or party; but that illustrations of sacred subjects by critical essays, general hints for improving legislation, and police, and antiquarian disquisitions, particularly as relate to Ireland, will at all times be acceptable, as would original poetry and every effort of ingenuity and erudition."

In plan and mechanical get-up the *Anthologia Hibernica* was not unlike the old *Gentleman's Magazine* of London. The Dublin periodical commenced under favourable auspices, with a large stock of original materials, and much promised aid from members of the University, the Royal Irish Academy, and other bodies. It commenced also with a goodly list of subscribers, comprising lords, earls, ladies, members of Parliament, professional and literary men—indeed several from various ranks, many of them then distinguished, and others who became distinguished a few years afterwards. It would be too tedious to enumerate here even the more prominent of the subscribers. In passing, we may note among the list of names in the first year's volume are those of Miss Owenson (the future Lady Morgan) and the Hon. Arthur Wesley, otherwise Wellesley, the future Duke of Wellington, of Waterloo fame, but in 1793 and for some time afterwards lieutenant-colonel of the 33rd Regiment.

The *Anthologia* contained in its monthly issue one or more well-executed copper-plate engravings executed by Dublin artists—Brocas, Henecy, and Clayton. The engravings were mostly in illustration of Irish antiquities, and the sketches of many were drawn by William Beauford, the antiquary, and a contributor to the magazine, as also a disciple and advocate of Ledwich's antiquarian views. Samuel Clayton was the father of Benjamin Clayton, who executed several of the woodcuts in the *Dublin Penny Journal*. The plates the former engraved for the *Anthologia Hibernica* were surprising specimens of youthful workmanship, as the young artist was but a boy in his teens, as the following notice, extracted from the September number of the *Anthologia* for 1793, will show:—

"In our next will be given an engraving of the church of Castle Dermot (County Kildare), by Samuel Clayton, a lad of sixteen years of age:—we hope it will be found a specimen of a young artist's labours, which will entitle him to public notice and encouragement."

The *Anthologia* devoted a considerable space to antiquarian essays and poetry. It contained also reviews of new native and foreign books, domestic and foreign intelligence, mathematical problems from school masters or principals of military and classical academies, a theatrical register, lists of bankrupts, births, marriages, and deaths, &c. The first two half-yearly volumes contain the most original matter, and on the whole, they are the most valuable. In the third volume there is a falling off, and a still greater in the last half-year's and concluding volume. Accompanying each bound volume there is a frontispiece engraving well executed. Among the more remarkable poetical contributors to the pages of the *Anthologia* were Thomas Moore and Thomas Dermody—both mere lads at the time. In the autobiographical prefaces appended to some of the later editions of Thomas Moore's life, he alludes to some of his juvenile verses which appeared in the *Anthologia* thus:—

"A sonnet to my schoolmaster, Mr. Samuel Whyte, written in my fourteenth year, appeared in

a Dublin Magazine called the *Anthologia*, the first and I fear the only creditable attempt in periodical literature of which Ireland has to boast. I had even at an earlier (1793) sent to this magazine two short verses prefaced by a note to the editor requesting the insertion of the 'following attempts of a youthful muse,' and the fear and trembling with which I ventured upon this step were agreeably dispelled not only by the appearance of the contribution, but still more by my finding myself a few months after hailed as 'our esteemed correspondent J. M.'"

In each "advertisement" or preface to the three first volumes the editors or conductors continued assuring their readers and subscribers of their intention of continuing the publication and making it more worthy of their acceptance and support; but, notwithstanding this assurance, the magazine was failing gradually for want of a hearty support, even on the part of its published list of subscribers, who, there is internal evidence for believing, did not punctually pay their subscriptions. There were several bookselling agencies for the magazine in Dublin and the provinces, and it had some London and foreign agents. The following "Valediction to the Correspondents of the *Anthologia Hibernica*" appears in the last number of the magazine:—

"The publishers of the *Anthologia Hibernica* at the conclusion of their labours in this line of their profession, would justly deem themselves deficient in gratitude to their truly respectable and numerous correspondents, if they did not embrace the opportunity to return to them their sincerest thanks for their many valuable and original communications, such as no similar work was ever honoured with in this country. Succeeding to the respectable appointment (Booksellers to the Hon. Society of King's Inns) to fulfil the duties of which in a manner suitable to its importance will demand much of that time which hitherto has been devoted to the *Anthologia*, they add for this reason principally the work is closed; others they have alluded to in the advertisement. To conclude, they earnestly request their friends, that to prevent disappointment they will immediately complete their sets before some of the numbers are out of print, and also discharge their arrears for those already delivered, which will add to the favours already conferred, and on which the publishers will ever reflect with pleasure."

Turning to the "advertisement" preface prefixed to the concluding volume, some suggestive reasons are given for discontinuing the periodical, and other reasons also may, perhaps, be deduced by readers who possess the volumes of the noted magazine in question, and who are well acquainted with its career, materials, and its chief contributors. We doubt much whether the *Anthologia* reckoned many regular paid contributors among its staff, as literary contributors are understood in our time. The work of printing and engraving and other mechanical work connected with its get-up was of course paid for, but outside its editorship the paid-for literary matter must have been small, and voluntary contributions can never be depended upon long. Even when help is promised by men of title, professional men, and men of literary abilities not obliged to write for an income, that help will not be continuous. The *Anthologia*, no doubt, suffered from these causes, for it depended for a large share of its materials on the voluntary aid of men who were not obliged to write, except when it pleased their fancy. The following is an extract from the preface of the last volume:—

"The time has at length returned when the editors of the *Anthologia Hibernica* must address the public. Upon such an occasion, when all the formalities of language are necessary to engage attention, they feel themselves more than commonly affected to declare, that in this capacity, they now speak for the last time, and this task being once accomplished they lay down their office, and shall address them no more. After a declaration so opposite to that prefixed to their preceding volume, many will, no doubt, be surprised, and many more disappointed. With those who are disappointed, they join their own regrets, and to those who are surprised, they shall explain their reason. From the commencement of the undertaking, the editors have indefatigably laboured to exalt their work to



the first standard of estimation. Whatever could be reaped by diligence, or be gained by cost, whatever could promote science and literature, they spared no pains to secure; they supposed themselves devoted to the cause of learning, and their labours were unfelt in the discharge of their duty. But occurrences which must always be expected in the present state of human vicissitude, have lately happened, which have defeated at once both their pursuit and design. Some of their associates have been dispersed to remote distances, and some have entered into professions which exclude all opportunities of similar literary disquisitions; induced by those circumstances, they relinquish their task, which, however it may ensure favour when properly conducted, must always produce contempt by a false and awkward appearance."

The farewell address of the editors, as a whole, is a feeling one, but such a one in the present day would sound oddly if the same reasons were given for suspending a popular magazine. The fourth and concluding volume is inscribed to John Lord Viscount Fitzgibbon, Lord Chancellor of Ireland, and it is the only volume of the four in which we find a dedication.

Having said so much about the magazine, it is but right its printer and publisher should come in for some notice. The *Anthologia Hibernica* was, "Dublin, printed for Richard Edward Mercier and Co., Booksellers, No. 31 Anglesea-street." Mercier was a descendant of a Huguenot settler in Ireland. He appears to have married his cousin, for we find he was married on the 6th of April, 1793, to Miss Maria Mercier, of Portarlinton. This town was one of the first places in which the Huguenots settled in this country. Besides being publisher of the *Anthologia*, Mercier published in 1796 and 1797 a now extremely rare periodical, entitled *The Flapper*, containing essays on various subjects. The *Flapper* was issued on Tuesdays and Fridays at the price of two pence, and it consisted of two folio pages. Mercier did a considerable deal of printing, and the works he issued were turned out in a very creditable style. He was for several years an eminent book auctioneer, bookseller, and a large importer of foreign books, and there is no reason to doubt what Mr. Gilbert says of him that he "possessed extensive and accurate bibliographic information. The *Anthologia* was an octavo in size, and the paper and typography were good. Mercier was bookseller to the Society of King's Inns and Trinity College for many years, the first appointment dating back to 1794. His death took place in 1820, but his name will live for long years in connection with the periodical literature of Ireland, and the printing, publishing, and book-selling trade of Dublin.

#### RIDING THE FRANCHISES.

QUITE recently we devoted some articles to the origin and history of this old civic custom, and how the perambulation of the city was carried out formerly in its fulness, and later in its shorn dimensions. Some fitful attempts were made at intervals within late years to revive the olden custom in part, but sufficient public interest was not manifested in its revival to ensure its continuance. There was a perambulation of the city during the mayoralty of the late Sir Benjamin Lee Guinness, in 1851, and another in 1857, during the mayoralty of Mr. Atkinson. If revived at all, the custom should be carried out triennially, but since the last-named year there has been no attempt made to continue the custom, until during the present mayoralty. Since the date of our last issue a perambulation of the city has taken place of a very ordinary character, and much unlike the pageants of the last century. The procession left the Mansion House about 10½ a.m. The first carriage, which was a closed one, contained the Corporate officers in state—the Sword Bearer, Mace Bearer, and City Marshal; following in an open carriage were the Lord Mayor, Town Clerk, and City Engineer; a third carriage contained the City Treasurer and City

Accountant. Accompanied by a body of mounted police the procession, quiet in all but the appearance of the massive mace and the Town Clerk's cocked hat, left the Mansion House and pursued the following route—Stephen's-green, North, Merrion-row, Upper Merrion-street, Merrion-square, West and North, Holles-street, Sandwith-street, crossing Townsend-street, through Creighton-street to Sir John Rogerson's-quay, and so to the South-wall, thence along Great Britain-quay to Ringsend Bridge, in order to surround the South Dock Ward. The procession then turned westward along Ringsend-road, to Barrow-street, and thence through Grand Canal-street, crossing the bridge and along the canal to Baggot-street Bridge; along the Circular-road to Griffiths Bridge. Thence the course was due north to the Circular-road at Richmond-hill, along Island Bridge-road, crossing Sarah Bridge to Conyngham-road, and thence by Parkgate-street and the North Circular-road to the gate leading to the Constabulary Barracks; thence by Phibsborough and across the canal bridge to the pin mill at the sixth lock, along the canal to the bridge at Jones'-road, and thence by Clonliffe-road to Ballybough Bridge. Here the procession turned down to Newcomen Bridge, crossing which it proceeded to Annesley Bridge, where it turned along the East-wall to the Wharf, or Smoothing Iron. From this point the end of the North Wall was reached. The "perambulation" of the city terminated here. The bounds of the South City wards were also beaten, together with one of the wards on the north side, leaving the remainder to be completed the next day. The perambulation occupied in all five hours.

After the perambulation the Lord Mayor entertained the Corporate, officers and members of the Town Council, at luncheon in the Mansion House. Various toasts were given, including that of the "Corporate Officers."

#### A BUILDING ACT, AND OTHER WANTS.

At a late meeting of the Metropolitan Board of Works, London, Mr. J. Runtz proposed the following resolution:—

"That it be referred to the Works and General Purposes Committee to consider and report what amendments are urgently required in the Metrothe same respectively, with respect to houses and politan Building Act, 1855, the Metropolis Management Act, 1855, and the acts amending buildings, and especially to report what amendments are desirable with reference to the width of roads, foundations of houses, buildings, and erections, and recovery of expenses relating to dangerous structures, with power to instruct counsel to settle any bill."

When will our Corporation earnestly make an effort to secure a building act for Dublin? We fear much that the Local Government Board will anticipate them by inserting building clauses in an amended public health bill; and too late the Corporation will find out that their sanitary powers will be small indeed, and their municipal privileges sadly shorn. Many building abuses and public obstructions could be put down by the civic authorities, even with their present powers under different sanitary acts, but they will not move, for reasons often alluded to in these columns. The cry of "no funds" is a very handy cry as an excuse for not carrying out an urgent public or sanitary want; but will someone move for a return of the money alone spent by the Corporation for the last seven years in promoting bills and in parliamentary and law expenses which profited the city nothing, and were not intended to benefit the public, but certain individuals? Lawyers have waxed fat on the city funds, and so has a do-nothing main-drainage staff and other officials. If the scandals that were known to exist and were exposed in Dublin happened in any town in England, the ratepayers would have risen in open rebellion against their local misrulers and hurled them from office.

Politics and polemics have been the bane of the Dublin Corporation. Both may be good in their place, but they are entirely out of place in a municipal assembly. We are no partisans, and it is immaterial to us what creed is the most strongly represented in the Town Council, so long as the sanitary and other wants of the city are attended to, and the public funds honestly administered.

#### THE SANITARY CONDITION OF ROYAL PALACES.

THIS subject has formed the theme of an article in the *British Medical Journal*, though not for the first time, for, if we remember aright, our contemporary the *Builder* more than once directed public attention to the same question. In passing, we may observe that if the homes of our poor and working classes received more attention at the hands of the public authorities, there would be less occasion to fear the break out of typhoid and other zymotic diseases in the royal buildings. Bad drainage everywhere, of course, is a dangerous evil; but that question demands as much supervision in connection with domestic buildings in general as public ones or palaces. The lives of kings, queens, and princes are, no doubt, valuable; but the safety of the population is a matter of paramount importance. The *British Medical Journal* observes:—"The very frequent appearance of late years of typhoid fever among the members of the royal family has naturally caused in the public mind a feeling of great doubtfulness as to the sanitary condition of the royal palaces. We are pleased to know that one of those buildings, Marlborough House, has been recently so thoroughly overhauled that all anxiety on the score of its bad drainage may now be dismissed. The whole of the basement has been examined, with the result of finding a most discreditable condition of affairs. Old drains and cesspools were found, the existence of which was not even suspected by any person in authority. No one knew what they had been made for, and they had formerly been cut off and were found to be filled with decomposing filth and swarming with rats. Of course, they have all been removed, and the ground they occupied has been filled in with concrete. New drains of the most approved description have been put down. All these works have been done by the Board of Works under Mr. Taylor, Chief Engineer Inspector of the board. As regards the other royal residences, we learn that Windsor Castle and Sandringham have both at various times been reported upon by Mr. Rawlinson. At Balmoral and Osborne the necessary sanitary works were thoroughly carried out by the late Mr. Cubitt, who built both houses. At Sandringham, since the illness of his Royal Highness the Prince of Wales, a special supply of pure water is furnished to the royal table from two springs on the estate, which, though small, produce very pure water. The house has also been thoroughly ventilated. The drains were examined by Mr. Rawlinson, who removed all the cesspools. The sewage is now to be carried by drains a mile from the house into the park. Waterworks are in progress, and will be completed before Christmas, which will provide a water tank 70 ft. high, capable of storing 32,000 gallons of pure spring chalk water, to be softened by Clark's process, and giving a pressure for fire service of 150 ft."

#### WARRENPOINT SEWERAGE.

THE guardians of the Newry Union have engaged the services of Mr. Bailey Denton, C.E., to report on the state of the sewerage of the town of Warrenpoint. The gentleman is to receive a fee of fifty guineas, with ten guineas as travelling expenses. We shall anxiously await Mr. Denton's suggestions for a grand main drainage scheme for this delightful summer resort—an engineering feat which perhaps was beyond the capabilities of all local C.E.s!!



# NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

HITCHCOCK has grouped together in his "View" the members of the Crow-street and Smock-alley companies in November, 1760, the list of which we annex, as it affords a good estimate of the relative strength of each at the period and the character of the acting, for several of the performers were distinguished by certain special characteristics in style, both in tragedy and comedy. The same author alluded to premises that Brown, the late manager of Smock-alley, had the good grace, in resigning the reins of government, to return to the ranks, where his talents were of great service. We are also informed that Ryder—of whom more will be heard hereafter—led a select and well-formed company into the interior parts of Ireland, where he continued for several years with character, reputation, and success. His visits included, amongst other places, Kilkeny, Wexford, and Galway.

The Crow-street company comprised the following actors and actresses—Barry, Woodward, Fleetwood, Dexter, Jefferson, Walker, Glover, Vernon, Hamilton, Mahons (senior and junior), Knipe, Morris, Glenville, Reed, Adcock, Hayes, Mynitt, Messink, Hastings, Oliver, Slingsby, Stageldoir, Raynor, Carroll, and Carmichael, the prompter. The lady portion of the company were—Mrs. Dancer, Fitzhenry, Abington, Jefferson, Bridges, Walker, Adcock, Mynitt, Packenhan, Knipe, Maxwell, Miss Osborne, and Miss Young.

The Smock-alley company were represented thus:—Mossop, Brown, Digges, Shaw, Griffith, Heaphy, Sowdon, Sadler, Sparks, Dawson, Usher, Kniveton, Heatton, Verneil, Weston, Ellard, Watson, Longfield, Williams, Somers, Aldridge, Booth, M'George, and Master Lewis. The ladies at Smock-alley were—Mrs. Bellamy, Mrs. Usher, Mrs. Dawson, Miss Kennedy, Danvers, Greene, Rosco, Mason, Heatton, Miss E. Heatton, Willis, Clarke, Dillon, and Signora Coralina and mother.

The above lists represent two very large companies, and Barry and Mossop must have been very sanguine indeed in calculating upon the patronage of the play-going citizens for their support in 1760. The remarks of Hitchcock upon the situation may fairly be quoted here:—"What a burthen must two such numerous companies have been to the town! What a division of interests must such a number of performers have occasioned! What a tax on amusement to support upwards of sixty actors and actresses, who with their unavoidable appendages of servants, dressers, hairdressers, &c., when united with bands must have amounted on the lowest calculation to upwards of two hundred persons. The very weekly salaries of the performers only at Crow-street often amounted to one hundred and fifty pounds, sometimes more, besides tradesmen's bills, and other inevitable disbursements, without the least allowance for themselves as actors or managers. So enormous an expense, the receipts of a London theatre at the time could but barely sustain; no wonder, therefore, that our managers were obliged in a little time to give way to such a pressure, and, though possessed of the greatest rectitude of principle, be unable to satisfy their creditors."

Though, compared with the weekly or nightly outlay for expenses in London theatres at the present time, the expenses incurred by managers in Dublin in 1760 appear very small indeed, yet they were serious enough when judged in connection with the time and the circumstances of Dublin.

The ambition and fierce rivalry of the Dublin managers blinded them to their weak points, and they were respectively as much interested in crushing each other as catering for the amusement of their patrons. The greatest exertions were made by both managers to bring forward popular actors and

popular plays, or new plays that had met a favourable reception on the London stage. If Crow-street theatre announced something novel, Smock-alley management did the same or something similar. It was "neck or nothing" with either management to see who would be the first to catch the taste of the public, or to anticipate one another in putting a new piece upon the stage for the first time. We are told of this time that intimation having been received that Mossop, Digges, and Mrs. Bellamy were to make their first appearance in Smock-alley in Pierre, Jaffier, and Belvidera, the Crow-street managers on the same evening announced Mr. Barry in Pierre, Fleetwood in Jaffier (his first appearance on the stage in Ireland), and Mrs. Dancer (afterwards Barry's wife) in Belvidera. On the same occasion at Crow-street followed, for the first time, the new pantomime of Queen Mab; Harlequin by Woodward; Columbine, Abington.

At Smock-alley, a crowded and fashionable house rewarded the manager. Digges, on the opening of the play, was received with warm plaudits, and Mossop's appearance was greeted with three rounds of applause, for he had many sincere admirers among the audience. Mrs. Bellamy on the occasion received flattering marks of public favour, although her acting and appearance sank in the opinion of several of the audience who had witnessed her some years before. Time had worked a change in her beauty, and her once sweet tones had assumed a harshness. At both houses the applause appears to have been equal, for good acting was manifested. Mossop and Digges supported their characters well at Smock-alley, and in the personation of Pierre, Mossop was superior to Barry. The Pierre of the former was, we are told, "according to the best judges as fine and characteristic a piece of acting as ever was exhibited. His voice, manner, and judgment were indescribable." This was no small testimony to the merits of Mossop.

In respect to Barry it is stated that he possessed "every requisite which the most luxuriant fancy could suggest for the support of Jaffier, and wanted many of the essentials for Pierre. With a form faultless and a voice modulated to the most perfect harmony, he did not possess the roughness of manner, nor the austerity of demeanour necessary for the latter character. That grace, and those tones, which in the expression of every softer passion, were of irresistible fascination, but ill depicted the sternness of the soldier, meditating dark and dangerous conspiracies."

Fleetwood, who had a fair voice and figure, supported the character of Jaffier with good effect, but he was by no means equal to Digges at the time in such or such-like characters. Comparing the lady actresses at each theatre, the advantage was said to be in favour of Mrs. Dancer, whose talents were rapidly improving as Mrs. Bellamy's declined. In the opinion of Hitchcock, Mrs. Dancer's Belvidera was equal to that of Mrs. Cibber. "Venice Preserved" was acted at both theatres, and repeated with no great effect, and the remainder of the season was signalled by unpleasant scenes of rivalry, vexation, great expense, and accumulating troubles to the managers of both the Dublin theatres.

At this point a few words will not be amiss respecting one or more performers of note, who figured upon the Dublin Stage at the time of which we are writing.

Though Mrs. Bellamy's star was on the wane in 1760, she was once undoubtedly a great and fascinating actress. Chetwood, in his "History of the Stage" (1749), writes at that early date of George Anne Bellamy—"She has a most admirable improving genius, therefore it will be no wonder if she soon reaches the top of perfection. She has a liberal open heart, to feel and ease the distresses of the wretched." Chetwood dates the actress's birth 1727, but the biographical dictionaries fix it in 1733. How the blooming Bellamy raised the ire of our own Peg Woffington is thus told by Dr. Doran, in his book more than once quoted—"The

charming George Anne Bellamy had procured from Paris two gorgeous dresses to enact Statira, in the 'Rival Queens.' Roxana was played by Peg Woffington, and she was so overcome by hatred, malice, and all uncharitableness when she saw herself eclipsed by the dazzling glories of the resplendent Bellamy, that Peg at length, to drive her off the stage, and with upheld dagger had well nigh stabbed her at the side scenes. Alexander and a posse of chiefs with hard names were at hand, but the less brilliantly clad Roxana rolled Statira and her spangled sack in the dust, pommelling her the while with the handle of her dagger, and screaming aloud

'Nor he, nor heaven shall shield thee from my justice;  
Die, sorceress, die; and all my wrongs die with thee!'"

It is but right to add that the above story is also told in other words by Campbell, in his "Life of Mrs. Siddons," of Mrs. Boutwell, who is said to have been the original Statira of Lee's "Alexander," and who received a stab from Mrs. Barry (Roxana), the real rivalry in this case being about a lace veil, which was at last awarded by the property man to Mrs. Boutwell.

James Quin, the actor, evidenced great kindness towards Mrs. Bellamy when young; and the latter, in her "Memoirs," in alluding to one of Quin's acts, thus writes:—"The tear of gratitude stood in my eye at this noble instance of generosity, and his own glistened with that of humanity and self-approbation." O'Keefe, in his "Recollections," speaks of the very beautiful Bellamy, with her blue eyes, and so very fair; and this was in Dublin, in the early days of the young dramatist, who adds:—"I often saw her splendid state sedan chair, with superb silver lace liveries, waiting at the door of Liffey-street Catholic chapel." The present generation do not need to be told that there is no Liffey-street Catholic chapel now, nor has there been for many years; but many of them need to be told of its site. It was situated on the south side of the street, between Mary-street and Abbey-street, and in the rear of the line of houses. The entrance was through a gateway, which we believe still exists. Though the entrance was mean and miserable, the chapel within was neat. In Liffey-street chapel the titular archbishop of Dublin formerly officiated, before the opening or completion of the Metropolitan chapel in Marlborough-street.

Much has been written of Mrs. Bellamy by others, and she has written much herself concerning the same in her own "Memoirs." Her life had a good deal of early and mid-day sunshine and evening shadows. She experienced the extremes—grandeur and poverty. Mrs. Bellamy's leave-taking of the stage is thus described by Frederick Reynolds:—"I dwell for a moment on a last appearance which I witnessed—namely, that of Mrs. Bellamy, who took her leave of the stage May 24th, 1785. On this occasion Mrs. Yates, who had retired from the profession, performed the part of the Duchess of Braganza, and Miss Farren, the present Countess of Derby, spoke an address, which concluded with the following couplet:—

'But see oppressed with gratitude and tears,  
To pay her duteous tribute she appears.'

The curtain then ascended, and, Mrs. Bellamy being discovered, the whole house immediately arose to mark their favourable inclinations towards her, and from anxiety to obtain a view of this once celebrated actress, and, in consequence of the publication of her life, then celebrated authoress. She was seated in an armchair, from which she in vain attempted to rise, so completely was she subdued by her feelings. She, however, succeeded in muttering a few words, expressive of her gratitude, and then, sinking into her seat, the curtain dropped before her. . . . Mrs. Bellamy was not only a beautiful woman, but a most accomplished actress. She was the successful rival of Mrs. Nossiter during the tedious "Romeo and Juliet" contest between Garrick and Barry. She also established Dodsley's play of 'Cleone,' refused by Garrick . . . , and, in the opinion of Quin, Garrick,

\* See ante.



and other critical contemporaries, she surpassed Mrs. Woffington in conversational powers." Mrs. Bellamy died in 1788.

Of Mrs. Abington, who figured conspicuously on the Dublin as well as on the London stage, Garrick could never afford a good word; in fact he hated the woman, and her merits in his eyes were consequently eclipsed. She was born in 1731, and lived on till 1815. She was the original performer of Lady Teazle—a character which Walpole considered a second-rate one, and asserted that the actress could never go beyond. Mrs. Abington's abilities, even apart from her Dublin acting, is testified by Mrs. Charles Mathews, Davies, Boaden, Dibdin, Fitzgerald, and other stage historians and dramatic critics.

### THE CONVALESCENT HOME, BELFAST.

THE "memorial stone" of this building was laid on the 18th ult. by Sir Richard Wallace, Bart., M.P. The ceremony took place opposite the front entrance, in which the stone had been placed previously. The Mayor occupied the chair. After some remarks by him, and an interesting statement of the history of the Belfast Royal Hospital, by Mr. E. H. Thompson, J.P., Captain Cox handed Sir Richard Wallace a beautiful silver trowel, and Mr. W. R. Jackson, architect, presented him with a neatly-finished mallet.

The building is erected upon a beautiful and picturesque site on the lower escarpment of the Cavo Hill, commanding a view of the Belfast Lough, County Down coast, and Carnmoney Hills. The grounds surrounding are beautifully wooded and admirably adapted for building purposes, for which, we understand, they are intended. The cost of the entire block of buildings, comprising the Convalescent Home and Children's Hospital, amounted to about £14,000. The building, which is in the Gothic style, is tastefully designed. The materials used consist chiefly of red perforated bricks, with a judicious distribution of black brick string-courses and bands; the dressings are of white sandstone, from the Scrabo quarries. The building is divided into two departments—that situated on the right being devoted to the Children's Hospital, and that on the left to the Convalescent Home. The former branch of the establishment is designed and arranged to afford ample accommodation for 32 children, and the latter for upwards of 30 patients. It is intended to enlarge the plan hereafter, so that above 100 patients will eventually be provided for. It is, perhaps, well to note here that special provision has been made by the architect in planning the building for the accommodation of 10 patients of the class who pay for their own attendance. These wards or rooms are each of capacious dimensions, airy, and well ventilated; when availed of, they are sure to be thoroughly appreciated. This supplies a want which has been long felt in Belfast by the middle class of the community, and we are glad to see that advantage has been taken of the facility thus afforded. The entire buildings are spread over an area of about half an acre. The children's wing is about 160 ft. long by 36 ft. wide, and comprises—on the ground plan, two large dormitories, matron's and nurses' bed-rooms, board-room, pantries, water-closets, &c.; and the upper, or chamber plan, is principally for dormitory accommodation. The Convalescent Home, which occupies the left of the block of buildings, is divided into various departments, provision having been made on the ground floor for a dispensary, surgery, major and minor dormitories, and extensive culinary offices (the latter consisting of kitchen, 30 ft. by 20 ft., pantry, dairy, larder, knife-room, meal-house, store-room, &c.) with extensive basement accommodation underneath. A spacious corridor, 240 ft. in length, extends from one end of the block to the other. This corridor is 10 ft. in width, with a ceiling of about 18 ft. in height. At the end of this corridor is a

beautiful stained glass memorial window, erected by the late John Martin, Esq., to the memory of his son, Samuel Martin, Esq., who died during the progress of the erection of the building. The inscription is taken from St. Luke xvi. 16:—"Suffer little children to come unto Me, and forbid them not, for of such is the kingdom of God." The corridor just mentioned opens out a direct line of communication between the children's hospital and nurses' hospital, and the approach is by a capacious porch and vestibule, with a waiting-room situated on the right of the vestibule, 16 ft. by 15 ft. To the left of the entrance is a large principal staircase, 18 ft. by 16 ft., in the lower portion of which lavatory and water-closet accommodation is provided. The chamber plan of the Convalescent Hospital is devoted solely to dormitory apartments, closets, and bath-room and water-closet accommodation. The latter system is thoroughly deserving of special comment, and may be described as follows:—It comprises an entire wing, extending from the rear of the hospital; this wing is 36 ft. by 17 ft., and is a two-storey structure, the lower or ground floor of which consists of a large bath-room 13 ft. by 14 ft. 6 in., containing two baths; extensive lavatory and other sanitary accommodation have also been provided. The upper floor of this wing consists of ladies' public and private bath-room. The water supply, which is more than ample, and of the finest quality, is piped direct from the adjacent mountains, and is impounded in an excellent reservoir situated on such an elevated position on the Throne Lands as to command the highest part of the buildings. Of the interior we can say that no effort seems to have been spared to render the arrangements complete, commodious, healthful, and convenient, special attention being devoted to the dormitory apartments, which are large, and appear to be exceedingly well ventilated—the ceilings are all at least 14 ft. in height. The exterior of the building is also worthy of commendation; it is of chaste and carefully-studied design. The works recently constructed, and comprising all the accommodation, excepting the Children's Hospital, have been carried out from the designs and under the superintendence of Messrs. Thomas Jackson and Son, architects, Belfast, the contractors being Messrs. H. and J. Martin. Mr. James Martin had the personal supervision of the works under the contractors.

### GREEK AND ROMAN ART—

THEIR CONNEXION WITH THE TEACHING OF THE CLASSICS.\*

PROFESSOR Colvin commenced by remarking that ever since modern Europe, at the close of the Middle Ages, commenced to turn its attention to the antiquities of Greece and Rome, two kinds of antiquities had been sought after and studied, viz., the remains of literature in books, and the remains of art and handicraft in architecture, sculpture, pottery, &c. But, although a classical education might be defined as the training of the mind by a systematic study of the genius of ancient Greece and Rome, that study had been, and was being, pursued in England almost entirely with reference to the literary remains alone. And yet, since the early days of the revival of classic learning, our materials for the study of ancient art had increased much more than our materials for the study of ancient literature. The stores of literary and monumental remains which we now possessed would have overwhelmed the imagination of the early labourers in the field of classic antiquity, enthusiastic as they were. Their enthusiasm gradually resolved itself into a settled, sober study of, and regard for, classic antiquity, and all civilised nations had agreed that this study of Greek and Roman antiquity should form part of the education of their sons. However great might be the progress of science, and however important

might be the increase in our knowledge of the natural world, the study of the antiquities of Greece and Rome would probably continue to the end of all things to be one part of the education of civilised men. A classical education, properly speaking, was one which, firstly, sought to get as much knowledge, and that knowledge as thorough and profound as possible, of the works and life of those two great nations of antiquity, the Greeks and Romans; and, secondly, in the course of the acquisition of that knowledge sought to impart to the mind as complete a training as possible. The one sovereign characteristic of the Greek genius was its anthropomorphism—that tendency of the Greek imagination to conceive of all the forces, both of nature and the human spirit, all powers, both of the physical and mental world, as incarnated in divinities possessing the attributes and lineaments of men and women, only stronger and more perfect than the men and women of the real world. This was the source of all the religion and all the art of that great people. Not only were they endowed with great physical beauty and perfection in their persons, but they lived under extraordinarily favourable conditions of climate; and the outcome of these conditions was that when they began to put their hands to tools, and to paint and carve the creations of their minds, in the course of a few generations they filled all the temples and towns with images the most beautiful the world had ever seen. Although an immense number of these works of art and handicraft had perished, they had not all disappeared, any more than had the whole of their literary remains. It was, unfortunately, true that all the most famous works of art known to the ancients were either destroyed or lost. Nevertheless, we possessed a mass of materials for the study of Greek art which could be made of the utmost service in connection with the study of classical literature. It should be borne in mind, too, that while the literary remains of ancient Greece and Rome were not at all likely to be materially increased—or, at any rate, the possibility of their increase was very remote—it was, on the other hand, quite certain that our store of classic antiquities in the shape of sculpture, architecture, pottery, and specimens of handicraft generally, would be largely augmented—to an extent, indeed, to which there was hardly any limit whatever. Perhaps some of his (the lecturer's) audience had read in the *Times* of that morning the interesting account which was given of one winter's discoveries in that great centre of ancient art, Olympia. These and kindred successes gave us every reason to hope that we were now only at the dawn of an era of such discoveries, and encouraged us to believe that our stores of antiquities would be enriched to an indefinite extent. Now, art was a language—and a language, moreover, which did not change, or become corrupt or forgotten, as did the languages of speech or literature. Was it not, then, of the highest importance that in training our youth in the knowledge of classic life and literature, we should also train them in a knowledge of classic art? This was a species of knowledge which, once properly imparted, would never be forgotten, and, taken in conjunction with the study of classic literature, would explain and illustrate the meaning of passages and make the study much more interesting. If a knowledge of classic art and antiquities formed part of a generally-recognised curriculum, our museums would not have the aspect of so many collections of mere dry bones which they presented, even to those who had had some classical training. What did the average classical scholar really know of classical art and antiquities, further than what he had learnt by turning to a dictionary to see how the toga was worn, or what was the arrangement of a Greek theatre? Any systematic study of classical art was almost totally unknown in England, in fact, it had only recently commenced to be known at all. It was almost completely neglected in our great centres of education,

\* Cantor Lecture. By Mr. Sidney Colvin, Slade Professor of Fine Art at Cambridge.





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UNIVERSITY OF ILLINOIS



the Universities; not that we had not in England archaeologists of equal name with the greatest of other European nations, but simply because they received no encouragement to popularise their special branch of learning, but had to pursue it almost alone, or in positions they might hold at the British Museum or elsewhere. In short, it formed no part of the general culture of educated Englishmen. Here, classical literature and language were studied to the neglect of classical art and archaeology. But it was not so in Germany, where there had been a great revival of classical knowledge and studies during the last century, this revival being largely characterised by the renewed interest devoted to monuments and works of art. For a long while England was at the head of classical scholarship, but since the time of Heyne and Winckelmann her supremacy in this respect had been on the wane. In every university of importance in Germany there was a more or less complete museum of casts from works of classic art, and the antiquities of Greece and Rome were studied, as they should be in this country *pari passu* with classic literature. The casts were used to illustrate the teachings of lecturers and professors. These studies were having the result of placing the Germans in the forefront of archaeological research, and we in England were compelled to go and sit at their feet. For a long time they had excelled as interpreters of classic antiquities, England being content with her until lately unrivalled rôle of explorer and discoverer (and amongst societies which had done much in this direction was the Dilettanti Society); but now the Germans were actually wresting from us the laurels which we had won in the exploration and discovery of ancient monuments. Incomparably the most important discoveries which had been made of late were those at Olympia by German explorers, although they had not caused the sensation which has followed the excavations at Troy and Mycenæ—these again being the work of an explorer of German name. The remarkable discoveries in Cyprus, again, were the work of an Italian, acting as American consul there. So that not only the scholarship of archaeology, but the enterprise of archaeology, seemed to be passing away from us into foreign hands. The lecturer next explained, by means of an illustration on the wall, how the Greeks rendered a mythological story in sculpture, choosing as his example the continuous sculptured frieze of the Choragic monument of Lysicrates, which represents the incidents connected with the attempt of the Tyrrhenian pirates to carry off Bacchus into Italy. The Choragic monuments were small, and were used for the purpose of depositing the tripods which were accorded to the owner or trainer of the chorus which had been the most successful in musical or dramatic competitions, there having been a whole street of these monuments at Athens. The Homeric hymn, which was read by Mr. Colvin, narrated how the sailors bound the god, how he broke the withs or chains with which he was bound, and changed himself into a lion, a well of wine at the same time huddling up in the midst of the ship, and vines and ivy springing up and entwining with the ship's tackle; and how the terrified sailors jumped into the sea and were transformed into dolphins. The same story was represented in the frieze, not in strict illustration of the poem, but in the manner most suitable to the special art of sculpture, and the way in which the subject was made to lend itself to the condition and limitations of sculptural art was in the highest degree interesting and instructive. In conclusion, Mr. Colvin said that in the study of Greek art for its own sake the student must necessarily acquire a knowledge of art generally and of its materials and capabilities. He must learn what could be done in marble and what in bronze, and what were the particular virtues and characteristics of other materials, such, for instance, as terra-cotta. Then, again, art had its historical aspect in common with literature. Of course the study of classical art could not

be studied apart from classical literature, especially the writings of some authors who wrote what we should call guide-books. Amongst them might be named Pausanias the cicerone and topographer; Pliny, the encyclopædist of natural history and the arts; and Lucian, the novelist and writer of romantic criticisms.

(To be continued.)

#### DONAGHENDRY PARISH CHURCH, STEWARTSTOWN.

THE parish church of Donaghendry, Stewartstown, was opened on the 12th ult. It may be remembered that the sacred edifice was destroyed by fire on the 5th February last, with its contents, including a valuable organ. The church had been re-opened after renovation in October, 1875, by his Grace the Lord Primate, at which time it was insured for the sum of £1,000, but this amount did not half cover the damage done by the fire. In 1875 the church had just undergone very considerable improvements,—upwards of £1,000 having been expended. The organ had only been a short time previous to the burning of the church purchased through the instrumentality of Colonel Caulfeild, D.L., J.P., and the Hon. Mrs. Caulfeild. The loss to the parish was certainly a grievous one, and there were few who did not sympathise with the respected rector, Rev. Mr. Young, and his parishioners.

Shortly after the eventful 5th February subscriptions for the restoration of the building were received, and as soon as possible the work of re-building commenced. Operations were actively pushed forward, and in a few months after the conflagration which proved so disastrous, almost a new edifice was erected on the site of the old. The new, or rather restored, church is certainly a very handsome edifice in the Gothic style, and built of stone. Over the main entrance there is a neat belfry, containing a finely-toned bell. Internally the fittings are simply in accordance with the general style of the edifice. The whole of the woodwork is of pitch pine, stained and varnished. The chancel is fully wainscoted, and the flooring is laid with encaustic tiles. At one side of the chancel stands the neat pulpit, while at the other the reading-desk is placed, in the centre the communion table, and close beside a baptismal font. The chancel and transept windows are of stained glass. The former contains, in tracery, the dove, lamb, and pelican, on a rich blue ground. In the lights below are designs in grisaille geometric work, containing Gothic foliated ornament of the ivy in centre and oak in sides, with a ribbon in each light, with texts, and an inscription at the bottom, "To the glory of God, and in loving memory of Emily Higinbotham Little, who entered into rest February 9th, 1875." The south transept window contains ornamental geometric work; at the foot is the following inscription:—"Sacred to the memory of Ellen Whittell, who died at Stewartstown, the 7th day of May, 1870, aged 64 years. This window is erected in kind remembrance of an amiable, loving, and affectionate wife, by her sorrowing husband, William Brown Whittell, M.R.C.S.E., and medical officer to the Stewartstown dispensary district for a period of nearly 48 years." The north transept window contains also geometric grisaille glass; at the foot is the inscription:—"In memory of Charles Lynd, of Mullanteran, Esq., and his wife, Jane Lynd; also, their four sons, Charles, William, John, and James Charles; and their three daughters, Annie Matilda, Grace, and Margaret." A number of the memorial tablets in the old church, which were very interesting and of great age, were destroyed, together with three memorial windows, beautiful in colouring and design. These latter have been replaced, but there are only two tablets on the walls of the restored edifice—one to the memory of John Little, Lieutenant 20th Regiment, and the other in remembrance of Arthur Wood Little, eighth son of John Little, Esq. At the west

end there is a small gallery, and here stands a new organ, erected by Messrs. Telford and Telford, our well-known Irish organ builders, who also erected the former instrument. The case is of an ornate character, and corresponds admirably with the architecture of the church. The organ contains but one row of keys, but the presence of the oboe tone, with addition of a swell, certainly would lead anyone to suppose there were two rows. The following is a technical description of the organ:—Open diapason, dulciana, Kohl flute, flute harmonic, principal, twelfth, fifteenth, oboe, and pedal bourdon. The mellow, rich, full sound of the open diapason was much admired throughout the opening service, and sustained the singing most successfully. There is great variety in the stops, and each was well displayed by the performer, Mr. W. Telford, Mus. Bac, organist of Christ Church, Kingstown. The church is heated with Messrs. Musgrave and Co.'s hot-air apparatus, and will be lighted with ornamental star lights. It will give accommodation to about 500 persons. The seats are of the most modern construction, being open, with sloping backs. The plans were prepared by Mr. Fullerton, architect, Armagh, and the work was carried out by Mr. Senior, Gortnaglush, Dungannon.

#### ADVERSARIA HIBERNICA,

##### LITERARY AND TECHNICAL.

It is a singular fact that there are several old public buildings and institutions in Dublin of note, the date of whose foundation is known, but no particulars exist or are accessible as to who were their architects or builders. We have other buildings, too, in our midst, the names of whose architects are disputed, some writers claiming them for one particular name and some for another.

In respect to the architects and builders of our old Dublin hospitals, very little appears to be known by the present generation. You might walk the streets of Dublin for a month or six months, and call in vain on your way into those founts of public intelligence, the daily newspaper offices, but you would be no wiser coming out than you went in as to who were the architects or builders of Swift's, Steevens', or Mercer's, Sir Patrick Dun's, the Blue Coat, Royal Hospital, Kilmainham, and other infirmaries and asylums. The architects of one or two of the above institutions are known to many, but a doubt exists as to others, though certain distinguished names have been mentioned. Sir Christopher Wren and Inigo Jones have appeared in connection with the Royal Hospital of Kilmainham; but as it was long since shown in these pages that Jones died in 1653, and the first stone of the Kilmainham building was not laid till 1680, the work could not have been Jones's, and there is evidence to show that it was Wren's. Swift's, or St. Patrick's, Hospital was designed and built by George Semple, the architect of old Essex Bridge and the granite octagon spire of St. Patrick's Cathedral. There was never any difficulty about knowing the architect of the Blue Coat Hospital, Oxmantown Green, for its architect, Thomas Ivory, was a practising Dublin architect of note, and the designer of several other public buildings in this city.

Strictly speaking, the architects of most of our public and domestic buildings were their builders, and they were more interested as builders and contractors in the trade of building than putting forward their names as architects for professional notoriety then or thereafter. Though builders, many of them designed well, used good materials, accumulated fortunes, and retired into private life in their old age unconcerned, whether their names passed down to posterity as architects. The profession of the architect in Ireland before 1770 was at a very low ebb, and scarcely any native practitioner before that date pursued his profession apart from that of a builder or contractor also.

Speaking of hospitals reminds us of a paragraph in one of Swift's letters to Dr.



King, a passage of which attracted our attention a few days ago. In a letter dated Dublin, June 14th, 1724, in writing to his lordship about church and other matters, and about the death of the primate (Dr. Lyndsay, who was succeeded by Dr. Boulter, Bishop of Bristol), Swift mentions that the primate had left the Bishop of Kildare, Dr. Ellis, and his steward, Mr. Morgan, his executors. Some who formerly belonged to him, remarks the Dean, think he had left £40,000, but others report that he died poor. The concluding part of Swift's letter to Dr. King, runs:—

"I found all the papers in the cabinet relating to Dr. Stevens' (Steevens) hospital, and therefore I brought them home to the deanery. I opened the cabinet in the presence of Mr. Bouchereau [a French clergyman] and saw one paper, which proved a bank note for £500. The greatness of the sum startled me, but I found it belonged to the same hospital; I was in pain, because workmen were in the room and about the house. I therefore went in the morning to St. Sepulchre's, and in the presence of Mrs. Green [the Archbishop's housekeeper], I took away the note, and have secured it in my cabinet, leaving her my receipt for it, and I am very proud to find that a scrip under my hand will pass for £500, &c."

A few words as to the foundation of Stevens' Hospital will be in their place here. In 1710, Dr. Steevens, a Dublin practitioner, bequeathed to his sister during her life his estate, amounting to £600 per annum, and after her death vested in three trustees, for the purpose of founding an hospital for the maintenance of the sick poor, as well medical as surgical students. With a rare generosity and self-denial, as soon as Dr. Steevens' sister came into possession, and anxious to fulfil the wishes of her brother, she immediately appropriated the greater part of the property to the building of the hospital, reserving to herself the small sum of £120 per annum, and apartments in the hospital. "Madame Steevens' Hospital," as it is often called, is situated to the north of Swift's Hospital. The building was commenced in 1720, and, though not entirely finished, it was opened in 1733 for the accommodation of a number of patients. As the hospital still exists, and we hope flourishes in our midst, and can be seen on any day, it is not necessary to describe its architectural or other features in detail. The building contains the library of Dr. Edward Worth, a physician of note in Dublin in the early part of the last century, and the library is decorated with portraits of Dr. Worth and Dr. Steevens. The architect's or builder's name we know not; and, from the long time the building of the hospital was in hands, we are of opinion that many builders and building workmen had a hand in it.

We are tempted to indulge in a little more Swiftiana in prose and verse, as the Dean of St. Patrick's poems, letters, essays, and tales are as suggestive of thought as Shakespeare's. There are very few things that the great English dramatist did not touch upon in one way or another, and the same may be said of Swift. Both used indelicate language betimes, but it was mostly for "holding the mirror up to nature," instead of pandering to the grossest passions. The times both lived in respectively were corrupt ones, and it was open indelicacy, but now it is veiled, and scarcely a whit less destructive, for it is eating away the hearts and souls of men and women like internal cancer.

In Swift's "Birth-Day Verses on Mr. Ford" there are allusions to some Dublin persons and places of note, and comparisons drawn between them and those in London at the time. Before giving an extract we may premise the "Thatcht" was the famous "Thatched House" over in St. James's-street, near the Palace, London; Corbet was the Dr. Corbet, afterwards dean of St. Patrick's, Dublin, on the death of Dr. Maturin, who succeeded Swift; Robin and Jack and Jack and Dan were the Revs. Robert and John Grattan, brothers, and John and Daniel Jackson, friends of Swift; Ormond was James Butler; and Belcamp was Robert

Grattan's seat on the Malahide road, about five miles from the city. The allusion to burying in linen needs this remark, that in the year 1733 there was an act passed in this country to bury in woollen:—

"If you have London still at heart,  
We'll make a small one here by art.  
The difference is not much between  
St. James's Park and Stephen's Green;  
And Dawson-street will serve as well  
To lead you thither as Pall Mall;  
Nor want a passage through the palace,  
To choke your sight, and raise your malice,  
The deanery house may well be matched,  
Under correction, with the Thatcht;  
Nor shall I when you hither come  
Demand a crown or quart of stumm.  
Then, for a middle-aged chamber,  
Stella may vie with your main charmer.  
She's now as handsome every bit,  
And has a thousand times her wit.  
The dean and Sheridan, I hope,  
Will half supply a Gay and Pope.  
Corbet, though yet I know his worth not,  
No doubt will prove a good Arbutnot.  
I throw into the bargain Tim—  
In London can you equal him?  
What think you of my favourite clan,  
Robin and Jack, and Jack and Dan?  
Fellows of modest worth and parts,  
With cheerful looks and honest hearts.  
Can you on Dublin look with scorn?  
Yet here were you and Ormond born.  
Oh! were but you and I so wise,  
To see with Robert Grattan's eyes,  
Robin adores that spot of earth,  
That lit'ral spot which gave him birth;  
And swears Belcamp is, to his taste,  
As fine as Hampton Court at least.  
When to your friends you would enhance  
The praise of Italy and France,  
For grandeur, elegance, and wit,  
We gladly hear you, and submit;  
But then to come and keep a clutter  
For this or that side of the gutter,  
To live in this or t'other Isle,  
We cannot think it worth your while;  
For, take it kindly or amiss,  
The difference but amounts to this—  
We bury on our side the Channel  
In linen, and on your's in flannel;  
You for the news are ne'er to seek,  
While we, perhaps, may wait a week;  
You, happy folks, are sure to meet  
A hundred . . . . in every street,  
While we may trace all Dublin o'er  
Before we find out half a score."

We will not stop to enquire whether the social evil has gone on increasing since Swift's time, but its extent is manifest in London and Dublin of to-day.

In another poem entitled "Stella at Wood Park," Swift humorously describes the features of the house and the hospitalities experienced there by Stella, in contrast with the poor fare she might expect in the city on her return home. Wood Park was the seat of Charles Ford, about eight miles from Dublin, where Stella often made long and welcome visits, and where Swift, too, was always welcome when he chose to come. Stella's return to the city is pictured at length:—

"The winter-sky began to frown;  
Poor Stella must pack off to town,  
From purling streams and fountains bubbling,  
To Liffey's stinking tide at Dublin;  
From wholesome exercise and air  
To sousing in an easy chair.  
But now arrives the dismal day  
She must return to Ormond-quay.  
The coachman stop'd; she look'd, and swore  
The rascal had mistook the door.  
At coming in you saw her stoop;  
The entry brushed against her hoop.  
Each moment rising in her airs,  
She curst the narrow winding stairs,  
Began a thousand faults to spy—  
The ceiling hardly six feet high,  
The smutty wainscot full of cracks,  
And half the chairs with broken backs.  
Her quarter out at Lady-day,  
She vows she will no longer stay  
In lodgings, like a poor grizette,  
While there are lodgings to be let."

The remainder of the poem is full of humorous wit. Swift's twitting Stella for aping the grandeur of Wood Park in town is best explained in the concluding lines of the poem:—

"For though my rillery were true,  
A cottage is Wood Park with you."

As Ormond-quay is mentioned in the above-quoted lines, it may be as well to add that Stella and the lady that often figures as Dingley in Swift's productions, lodged together in the same house on the quay. The last-quoted verses of Swift were written in the year 1723.

Sir Edmund Beckett, Bart., in his recent "Book on Building," makes some remarks on "Ivy and Trees" in connection with

buildings, old and new, which are worth considering. He writes:—

"Some years ago archdeacons used to go about the world charging against ivy as making churches damp. I believe they have since learned better; at any rate, it is now well known that nothing tends so much to keep walls dry as ivy, especially west ones, against which the rain beats hardest. I have heard of west rooms which never could be kept dry until they were covered with ivy. It is also cool in summer and warm in winter; for trees, like animals, have a constant vital heat of their own, which is put in some scientific books at 55°, and everybody knows that they are sometimes killed by the extreme cold like animals. But you must take care that ivy does not get into holes or cracks in your walls or it will split them into pieces in time."

A good deal might be written in favour of the properties and uses of the ivy plant. In some back volumes of this journal the subject was treated, if we remember aright, at some length, and we may take it up again. It is becoming fashionable now-a-days to plant ivy to train up the walls of new churches, to give them an antique look in a short time. Indeed in the matter of architecture, ivy of late years has been made to cover a multitude of sins. Much bad brick and stone church-building and monstrous design have been decently covered out of public sight within the last few years by the application of ivy. If ivy gives warmth to the walls of some churches, it also gives relief to the eyes and feelings of many who would be outraged by a full view of the church without its ivy covering. H.

#### ADVANTAGES OF SCIENTIFIC EDUCATION.

PREVIOUS to the distribution of prizes in connection with the Liverpool Science and Art Classes by Sir Sydney Waterlow, M.P., on the 20th ult., that gentleman delivered an address on the advantages of scientific education. He traced the establishment and progress of science and art classes in England. They were begun about the year 1860 in connection with the East Lancashire Institution of Evening Classes, and afterwards, as was known, the matter was taken up by the Government. He pointed out the necessity for a better class of teachers for the middle-class schools of the country, in order that they might be able to keep pace with the large elementary schools, where only competent and properly certificated teachers were now employed, while in the private schools any man or woman could set up as a schoolmaster or schoolmistress if they only had sufficient impudence and sufficient surface knowledge. He knew that there was a strong objection to interfering with those private schools, but he felt strongly that the teachers of them should be compelled by some examination to show their competency, otherwise he feared that the children of the middle classes would suffer materially, and might be outstripped by those having the advantage of certificated masters in elementary schools. He was in favour of scientific education in rate-aided schools, the only restriction being as to the age of the children admitted to the science and art teaching given therein. He did not believe people could be taught too much. The Education Department seemed to be desirous to promote, as far as possible, science and art education throughout the country, and he had hopes from a recent speech delivered by Lord Sandon that something would be done to establish such education in the public elementary schools. The policy indicated by Lord Sandon was precisely what he understood was the policy followed at Liverpool and Birkenhead, viz., that science and art schools should be entirely self-supporting. No doubt at first they required a little assistance; but with the earnest desire there was to establish those schools, he had no doubt there would be good-hearted and wealthy people ready to give them a start. With regard to the practical advantages of such teaching to the artisan and the mechanic, we must seek to educate our people to do the



superior work of the world. We should seek to be the producers of the higher classes of manufactures for the world. With this object they must improve the technical education of the country. He did not think the Government had yet devoted any money at all to this object; but he mentioned with satisfaction that the wealthy London guilds had raised an income of £12,000 to £15,000 a-year for the promotion of technical education throughout the country. He was glad to recognise the fact that local effort had provided science teaching for the Liverpool board schools.

### THE BUILDING DISPUTE IN LONDON.

THE strike on the part of the London masons—but particularly only in relation to the Law Courts—still continues. The contractors for the works of the Law Courts, and some few other builders, have imported a number of foreign masons—German, Italian, and American, but a large number of these workmen have it appears already sympathised with the London masons, and refuse to work while the dispute lasts. Several of the foreign masons have been sent home by the London Operative Masons' Society, and others are put on the strike roll. It is stated that a large number of masons from America and the continent are on their way to supply the places of the men on strike, but we are of opinion that this importation of foreign labour will not be successful. The differences between employers and workmen must be settled in some other way. The interests of each are best served by friendly relations and not antagonism.

### THE DEATH OF EUGENE ALFRED CONWELL, M.R.I.A., &c.

We regret to have to record the death of Mr. Conwell, which took place on the 28th ult., at Carlow. The deceased, besides being a member of the Royal Irish Academy, was also a member of the Royal Historical and Archæological Association of Ireland, and an Inspector of Irish National Schools. Some interesting papers from his pen on antiquities and kindred subjects will be found in the transactions of the above societies. We reviewed at length in these columns a small but interesting volume of his published in 1873, entitled "Discovery of the Tomb of Ollamh Fodhla," Ireland's famous monarch and law maker, upwards of three thousand years ago. The volume in question was well written and illustrated, and evidenced considerable literary ability and archæological research. The deceased at the time of his death was in his 58th year. Hereafter we may have occasion to allude more particularly to his life and labours.

### THE ARCHITECTURAL ASSOCIATION (LONDON.)

On Friday evening, 26th ult., the *conversazione* of the Architectural Association, at which a large number of members and their friends attended, took place at the rooms, 9 Conduit-street. The company was entertained by a display of numerous sketches lent by the associates, as well as specimens of art needlework and furniture. After the distribution of a number of books as prizes to students who had attended the classes during the past session, the president (Mr. Bowes A. Paice) delivered an address, in which he enumerated the various classes, and said that the past session had been a very successful one. The president then spoke of the revival of the art of needlework, remarking that a great impetus had been given to that revival through the encouragement given by the royal family to the movement, her Royal Highness the Princess Christian being President of the Royal School of Art Needlework, and the Princess Louise President of the Ladies' Work Society.

### THE LAIRD STATUE, BIRKENHEAD.

Mr. Bruce Joy, sculptor, a native of and well known in Dublin, has (says a contemporary) achieved a marked success in his profession. A successful casting of the statue of the late Mr. John Laird has just been made. It weighs about 50 cwt., stands 10ft. high exclusive of the metal base, and when mounted upon its pedestal of grey granite, at Birkenhead, the full height of the monument will be 24 ft. A London correspondent to the *Liverpool Courier* thus speaks of our talented citizen:—"Mr. Bruce Joy has done his work under exceptional difficulties, in having to chisel a likeness of colossal dimensions from a small photograph. As he never saw Mr. Laird in the flesh, there is more room for legitimate admiration of the completeness with which he has reproduced to familiar friends the characteristics of the original. The statue is a success artistically and as a likeness. Mr. Laird stands with one hand slung in the breast of his buttoned coat—a characteristic attitude with him; the other hand resting on a low pedestal, over which lies a pile of drawings spread out, the top sheet showing a bold tracing in outline of the Birkenhead docks, of which he may be regarded as the projector if not something more."

### BUILDING SOCIETIES.

We are in receipt of a very useful and instructive pamphlet, entitled "Building Societies—Not as They Are, but as They Should Be," by Samuel G. Platt, published by E. W. Allen, London, and Poulton, Aylesbury. We will on an early opportunity take a look into this argument for investors and borrowers, and give those who are members of building societies in this country, or intending to become such, the benefit of the sound advice tendered in the pamphlet.

### THE "DEPUTY SURVEYOR."

On this day the election of a competent experienced man to keep the streets of "dear dirty Dublin" in somewhat better order than heretofore, will take place. There are, we understand, six candidates for the post. We hope that in future there will be no more complainings in or of the "Streets of Dublin!"

### CORRESPONDENCE.

#### GAS MECHANISM AND SUPPLY.

TO THE EDITOR OF THE IRISH BUILDER.

SIR.—The letter on the above subject which the Lord Mayor, at the meeting of the Corporation on the 15th inst., stigmatised as insulting, and refused to read to the council, was the fourth letter on the same subject that had been written since 1872 to the chief magistrate for the time being, the receipt of any one of which was never acknowledged, unless the mention of this one in the newspaper reports of the Corporation meeting could be termed such, although the second and third of these letters offered to prove the statements put forward in them. That letter was chiefly intended to point out the root of the evil so loudly complained of by gas consumers, and called upon his lordship to investigate those complaints, with a view of having the laws for regulating the measures used in the sale of gas amended.

The gas measures at present in use in Dublin and the surrounding townships could not be expected to register correctly the bulk of gas passed through them. Because, first, the standard gas-holder had been too long in use to be a reliable guide in testing the measuring capacity of a gas meter. Secondly, the existing laws do not require that the index multiplying wheels should be proved to be correct, before the meter was sealed as being so. Thirdly, the pressure on the gas passing through the meter at the time of its being tested and supposed to register correctly, was very much lower than the pressure nightly used, and which pressure is calculated to cause the indices of the wet meters to register the passage of fictitious bulks of gas.

I wrote that letter believing that the Alliance and Dublin Consumers' Gas Company could be viewed as a municipal as well as a commercial undertaking, slightly noticing the apparent in-

decency of having members of one family performing the duties of both departments, and shewing the results of such an arrangement. Though not possessing the gift of versatility of style in writing, I endeavoured to word that letter in such a manner as would enable the present occupant of the civic chair to fully comprehend its intent. It was not intended to give offence, but simply suggested an inquiry, which would reveal the fact, if the late dividend of 10 per cent. on Alliance gas shares and £8,000 balance, were honestly acquired or not.—

Yours, &c.,  
October 24th, 1877.

JAMES KIRBY.

### HOME AND FOREIGN NOTES.

Mr. James Fergusson has in the press a monograph on "The Temple of Jerusalem, and the other Buildings in the Haram Area, from Solomon to Saladin." It will be issued by Mr. Murray.

ARCHITECT AND TOWN COMMISSIONER.—Mr. W. Crampton, a local architect, and for several years a member of the Athy Town Commissioners, has been elected to the office of chairman of that body for the ensuing year.

Mr. George Howell is writing a book, to be entitled "The Conflict of Capital and Labour," in which the history and the various aspects of trade unions, technical education, &c., will be treated at length. The publishers will be Messrs. Chatto and Windus, London.

THE FAÇADE OF THE DUOMO.—The Façade of the Duomo at Florence, so long left unfinished, is at length likely to be completed, and the Pope has blessed the designs. His holiness has given a beautiful mosaic of Raphael's "Madonna di Foligno" (now in the Vatican), to be placed in the Duomo.

DEATH OF A DUBLIN JOURNALIST.—Since our last issue the death has taken place of the Rev. George B. Wheeler, A.M., Rector of Ballysax, and for many years past editor of the *Irish Times* under the late Major Knox and under its present proprietor. Mr. Wheeler was also formerly for some time connected with the *Daily Express*, and a contributor to some London periodicals.

THE PARIS EXHIBITION.—Season ticket holders at the forthcoming Paris Exhibition, following the fashion of the Philadelphians last year, will all have to paste a photograph on their vouchers, a duplicate photograph being pasted in the book whence the voucher was withdrawn. The price of the season ticket will be £4.

AN AQUARIUM FOR BRAY.—The prospectus for the establishment of an Aquarium Company at Bray has been issued. The building, which it is contemplated to erect on the Carlisle Grounds, will contain a marine aquarium, concert hall, lecture and exhibition rooms, also reading and refreshment rooms. The grounds surrounding the building will also be laid out as a rink, croquet, archery, and promenade grounds. Mr. J. F. Fuller, F.S.A., is the architect for the building.

ST. CATHERINE'S CHURCH, TULLAMORE.—On to-day, 1st November, St. Catherine's Protestant Church, which has been repaired at the expense of Lady Charleville, will be reopened. A special service will take place, and Lord Plunket, Bishop of Meath, will preach the sermon. The expense of the alterations will be at least £2,000, and, in addition to this sum, Lady Emily Bury, niece to Lady Charleville, gave £1,000 towards the endowment of the parish.

EFFECTS OF STORM.—It is stated that a recent gale carried off a large cistern from the top of Gormanston Castle, breaking the pipes connected with it in its fall, and inundating several rooms of the mansion. At Kilbreckstown, in a farm belonging to William Walsh, Esq., J.P., of Stedalt, an elliptic felt roof, some 80 ft. in length, was lifted clean from its position on the walls of the farmyard, and carried, all of a-piece, a distance of about 25 ft. into the adjoining field, where the owner found it on the following morning quite flattened out by the force of the fall.

OBSTRUCTING THE THOROUGHFARE.—At the Limavady Petty Sessions several traders were summoned for obstructing the thoroughfare by placing articles of merchandise opposite their doors and outside their windows. The traders, believing they had a right to place their goods on the water-table, contended that they were not guilty of having caused an obstruction at all. After a long discussion between the magistrates and the traders, in the course of which some very strong language was used, the magistrates decided to fine the defendants in the nominal sum of 1s. each and costs.

The price of gas in Newry is to be reduced to 5s. 5d. per thousand on and after 1st January next.



### NEW ORGAN, TULLOW CHURCH, COUNTY CARLOW.

On the 25th ult. a fine organ was opened in Tullow Church, the event being marked by a special service, at which an elaborate and well-chosen selection of music was sung by a highly efficient choir of 60 voices, and the varied resources of the instrument were ably displayed by the organist. The organ consists of a great, swell, and pedal organs, and contains 16 stops. It is placed on the western gallery, enclosed in a Gothic case of stained pine, impost high, the pipes of the great open diapason and the pedal bourdon and principal being symmetrically arranged above, neatly decorated. The volume of tone is rich and mellow, of ample power to fill the church, the pedal bass being particularly effective and telling; and there are a number of solo stops of sweet and varied tone. The instrument was erected by Messrs. W. Browne and Son, of Dublin, in their usual excellent and reliable manner.

### LISBURN CATHEDRAL.

#### RE-OPENING OF THE ORGAN.

On the 14th ult., special services were held in the above cathedral, on the occasion of re-opening the organ, which has just been enlarged, renovated, and modernised by Messrs. Telford, of this city. Through the munificence of a former possessor of the Hertford estate the instrument (at that time considered one of the first of its class) was presented to the church; but so essential to good music have been the improvements introduced in the interval, and the mechanism of the old organ having yielded so much to the rude hand of time, that it was determined to represent the case to Sir Richard Wallace, Bart., M.P., for the borough, who at once expressed his desire to bear the entire expense of the contemplated work. The Messrs. Telford having completed their contract to the satisfaction of the rector and select vestry, the ancient cathedral of Connor may now boast of having (through the munificence of a member of its congregation) one of the finest organs of the diocese.

The following description will convey an idea of the improvements that have been carried out in the organ:—

The old organ contained a great organ, with—1, open diapason; 2, stopped diapason; 3, open diapason; 4, principal; 5, twelfth; 6, fifteenth; 7, mixture; 8, trumpet; 9, flute. A swell organ from F, with—1, open diapason; 2, dulciana; 3, stopped diapason; 4, principal; 5, trumpet; 6, oboe; 2 couplers and 3 composition pedals. In the recent additions by Messrs. Telford, the compass of the great organ was made from CC to G. A gamba and a flute harmonic were introduced in place of trumpet and octave, and the whole re-voiced on a heavier pressure of air. A new swell organ from CC to G, containing—1, bourdon bass; 2, double geducht; 3, open diapason; 4, dulciana; 5, octave; 6, fifteenth; 7, mixture of 3 ranks; 8, corneopane; 9, oboe. A pedal organ from CCC to F—30 notes, with double open diapason; 16 ft.; radiating German pedals; three coupling action, composition pedals; new double-feeding bellows; new keys and action; a tremulant on the swell organ.

The great organ has been much improved in effect, while the fine quality of tone of the original builder has been carefully preserved. The gamba and flute harmonic are beautiful solo stops, in which the organ was deficient, and add much to the quality and balance of it. The new swell organ is most effective—the dulciana so soft and delicate, while the full power, when all the stops are used, is very great; and, when coupled to the great keys, is really grand. The diapason, corneopane, bassoon, and oboe are each excellent, with much individuality of tone. The pedal pipes are very good, and well balanced in power to the organ, giving ample weight of bass, without being too heavy, which is so often the case. A new and most pathetic effect is produced by the tremulant, which, in the hands of Mr. Atkinson, the organist of Lisburn, was very effective, and it evidently

requires skilful treatment. This one is on the improved plan invented by Messrs. Telford.

### MORTALITY IN DUBLIN.

THE city death-rate, to which we have several times recently called attention, continues so seriously in excess of that of even the most unhealthy towns, that the loss of life and health within the city ought to be very gravely considered. In spite of the beautiful summer weather of the past week, the mortality rate amounted to 25·3 per 1,000 of the population, largely in excess of that of overcrowded Glasgow (21·7), still farther outstripping London (19·3), and being nearly double that of Edinburgh (14·7). That this grievous unhealthiness of the city is not the result of an exceptional sickness wave passing over it, is shown from the returns of the Registrar-general for the quarter ending 29th September, which have just been issued. Here we find that the death-rate of the city (which is under the sanitary administration of the Corporation), was 22·3 per 1,000, while that for the suburbs (which are "sanitised" by the various township commissioners), was only 16 per 1,000. The most unhealthy of the Scotch towns, Glasgow, had a considerably less death-rate (21·0) than Dublin; while London ranked for 19·3, and Edinburgh—the most healthy—for 17·8.

Dublin, from its situation and the nature of its industries, ought to compare very favourably with Edinburgh, and yet we see how terribly unhealthy it is in comparison. The difference of 4·5 per 1,000 between these respective death-rates means briefly that one-fourth more persons die in Dublin than would die if the same population lived in Edinburgh; in other words, that nearly 1,500 lives are annually sacrificed to the continued unhealthiness of Dublin. For many of these lives and much of the misery which the mortality involves, we assert that the sanitary chaos over which the Dublin Corporation presides is directly and immediately responsible. Serenely unruffled by the daily increase of mortality, and complacently satisfied with the weekly apology of their consulting sanitary officer (who assures them with monotonous regularity that the sickness is of no great account, and is due to anything but dirt diseases), the Public Health Committee make absolutely no effort to remove the causes of death. Squalor and stench in the dwellings of the poor, laziness and incompetence in the sanitary authority, go hand in hand in the settlement of the matter, and the lives and pockets of the citizens pay for this harmony of action. A hundred thousand pounds spent *honestly* on drainage, and a little more activity and less jobbery in the Town Council, would in ten years' time save an army of lives and six times the sum in money, but nothing can be hoped for while the "City Fathers" continue the laughing-stock of all thinking men.

### THE DWELLINGS OF THE POOR IN LARGE TOWNS.

AT one of the recent sittings of the Sanitary Congress at Leamington, Mr. H. C. Burdett read a paper on the above subject. After a lengthened description of tenement houses in Dublin and London, he continued:—Such a state of things was no doubt due in a great measure, amongst other causes, to the present system of employing agents to manage these small properties and collect the rents. These agents passed the houses on from hand to hand, until the last holder, to make any profit at all, was compelled to cram into every room as many people as he could get into it. Another source of the evil was to be found in the fact that so many of these tenement houses were in the hands of poor and unscrupulous persons, whose living depended on how much they could screw out of the rooms. The powers vested in the health authorities in respect of overcrowding might be increased with very great advantage. He would especially recommend one practical means of promoting a better state of things, which was happily within the reach of all, and that was to take shares in such associations as the Artisan and Industrial Dwellings Companies. He also most particularly impressed upon all the necessity of agitating for an extension of the present Public Health Act, more especially with a view to the introduction of a new clause fixing the amount of cubic space which landlords must provide for every occupant in every room in these tene-

ment houses, the 91st section of the present act being much too vague on this point, which could not safely be left to the decision of magistrates who had not seen the rooms in question. In conclusion, he would express a hope that practical philanthropists would themselves visit the houses within their reach, and he was convinced that if all would do this, the present horrible condition of affairs would speedily disappear.

On the same subject at the same meeting Mr. J. A. Russell began by remarking on the singularity of the fact that while the need of healthy dwellings was so patent, nothing should yet have been done to instruct those who make and put them up. Even architects had given abundant proof how little they understood of the subject, and however much had been said of the cupidity of those who ran up the mushroom dwellings of the period, he did not think anyone would venture on such a work unless eased in a triple shield of ignorance. Builders and plumbers were especially exposed to temptation, and considering that the whole work of the latter was hidden away out of sight, it must be admitted that a good plumber must be a remarkably honest man. No amount of legislation, however, would be of any avail without education; but if once workmen were made really aware of the amount of injury to health occasioned by bad work, few, he thought, would be so heartless as to join lead pipes without solder, or put cement only on the top or exposed side of the joint in an internal drain, leaving the rest open. As it is, all the mischief they anticipate doing is a slight smell, which they would think nothing of themselves, and fancy other people effeminate for minding. Much, he thought, might be done to mend matters by a short course of lectures in every town, setting forth the conditions to be fulfilled in building and fitting a house, and explaining the principal properties of liquids, gases, subsoils, &c. No builder who saw a candle extinguished by air blowing through a brick, and the effect produced by placing the brick in water, would ever again regard bricks and mortar with quite the same carelessness as before. Such lectures might best be delivered by the medical officer of health, and he was glad to say the Royal Scottish Society of Arts had already arranged for the delivery of such a course in Edinburgh.

### THE ELECTRIC LIGHT IN WORKSHOPS.

THE electric light is being used to a considerable extent as a substitute for gas—or, we might almost say for daylight—in France, and there is no reason why it should not be employed here in the same way. The objection that it throws inconvenient black shadows is easily overcome by the use of two lights, so that one may illuminate the shadows cast by the other. One lamp usually lasts for from three and a-half to four hours, at the end of which time new carbons must be inserted. This, however, is the work of but a few seconds, so that the temporary extinction of light is not materially inconvenient, especially if more than one lamp is used. As a general rule one lamp will illuminate sufficiently an area of 5,120 square feet in a machine shop, half that area in a printing or weaving establishment, and four times that area on a quay, shipyard, or other locality where fine work is not carried on. With these data it is easy to determine the cost of installation, knowing that of the complete apparatus. In France the expense of the latter, according to the *Scientific American*, including lamp, magneto-electric machine, wires, &c., is about £96. As to practical results, the following information will no doubt interest many of our readers: The Gramme Company use a single lamp in their principal workshop. It has operated regularly for four years, and the average expense, incidentals included, has not exceeded 6d. per hour. The room lighted is 16 ft. high, and 1,468 square feet in area. Twenty-four gas burners were previously used. At the Du Commun Works at Mulhouse, four lamps, worked by a Gramme machine, are employed in the foundry, which has nearly 16,000 square feet area. The lights are attached to crossbeams 16 ft. above the floor. The first cost was £400, or about that of 250 gas burners. The light obtained exceeds that of 400 burners. Messrs. Sauter, Lemonnier, and Co., of Paris, are well-known manufacturers of



lighthouse lanterns. Their principal workshop consists of two bays or sections, each 96 ft. long by 80 ft. wide; the intermediate space is 32 ft. in width. On the lower floor are machine tools, and on the story above the patternmakers and moulder. Each of three Gramme machines maintains a light equal to 100 gas burners, and the three lamps illuminate all the shops sufficiently to admit of the use of tools of precision, requiring delicate adjustments. The electric machines are fixed in the engine-room, and are driven at the rate of from 850 to 900 turns per minute. About 2-horse power is required to operate each machine. Carbons are consumed at the rate of 2·7 in. per hour, and cost about 20 pence per yard, so that each machine, equal to 100 Carcel burners, costs for maintenance 2·8 cents. per hour plus the expense of motive power. We could easily extend our list, but we fancy that two more examples of the regular application of the electric light to industrial purposes will suffice. In one cotton mill the room on the first story is 10 ft. 6 in. long by 66 ft. 6 in. wide. Two lamps here illuminate ten self-acting mules. The Gramme machines are placed at the extremity of the shops, and are worked by the main engine. The lamps are fixed 63 ft. apart, and are suspended at a height of 10 ft. 8 in. This arrangement proved successful under the bad conditions of very low ceilings. The apartment in the second story is much smaller, and one lamp suffices for five mules. At the goods station of La Chapelle, Paris, the space to be illuminated consists of a shed 192 ft. long, 80 ft. broad, 25·6 ft. high; a court 64 ft. wide, and a wagon house 224 ft. long, 48 ft. wide, and 25 ft. 6 in. high. The shed is lighted by two lamps placed at a height of 5 ft., and arranged in lanterns, the lower part of which is painted white, so that the eye is not dazzled by the electric arc. The light is sufficient to allow of the business in all its details being carried on. The engineer of the station reports that 25 per cent. less men are now needed for night work. One lamp suffices for both house and courtyard. These facts are very suggestive, and it is worth notice that some of the gas companies are already manifesting uneasiness in this country. At recent meetings of certain gas companies allusions were made to the electric light, and the shareholders were told they had nothing to fear. A reduction was also made in the price of gas.—*Engineer.*

#### RE ARTISANS' AND LABOURERS' DWELLINGS ACT.

WE subjoin a correspondence in reference to the above subject, which was read at a late meeting of the Corporation, with the discussion that took place thereon. The application of the Artisans' Dwellings Act to Dublin has over and over been treated in these columns, for the city is full of rookeries, and disease and death is generally rife. The dealings of our Corporation on the head of the act will need a careful watching, for we fear there will be not a little jobbery between certain officers of the Town Council and outsiders—the outsiders, or supposed outsiders, in some instances being also insiders. In any large scheme for providing new and improved dwellings for the working classes that may be carried out, we trust that the wants of those likely to be dispossessed will be considered beforehand. Hundreds, nor even dozens of families, must not be turned out of their homes until other suitable dwellings are provided or erected for them near to the centre of their employment. Let the public bear in mind that the intention of them is to provide for such a want. If corporate or local authorities fail in doing their obvious duties, an appeal to the Local Government Board will likely lead to an adjustment. Some artisans' dwellings companies are fairly doing their duty; others, as the daily papers have lately shown, have acted otherwise. We know of companies in more than one place in the British Islands which have been carried on on a system little better than a swindle; and we know also some corporations and local boards who have played into the hands of artisans' dwellings companies—members of the one being also members, or rather directors and shareholders, in the other. In these instances the pure motive was not to provide healthy dwellings for the working classes, but to put up "scamped"

dwellings, and pocket large bonuses and dividends.

The following report was submitted to the Council:—

Your committee beg to report that on the 23rd July last the Local Government (Ireland) Provisional Order Artisans' and Labourers' Dwellings (Dublin) Confirmation Act, 1877, 40 & 41 Vic., cap. 122, received the Royal assent. The act is compulsory and it now becomes the duty of the Town Council to carry its provisions into effect. The resolution appointing your committee was dated 12th August, 1867. Subsequent resolutions of Council empowered your committee to take steps to have the scheme embodied in an act. These purposes having been accomplished, the functions of your committee have ceased, and it will be necessary to appoint a fresh committee, or to re-appoint the present committee for the purpose of carrying the act into effect. Your committee, being desirous to be informed as to the exact steps necessary to be taken to carry the act into execution, procured from your Law Agent, Mr. MacSheehy, a report which they submit herewith. It will be seen that the necessary funds must be provided, not by a separate rate, but by the borough fund or borough rate, should the borough fund be deficient, as your committee understand that it is. This mode is complex, but can be worked with proper co-operation between the two committees. The borough fund and all rates leviable in aid thereof, are under the control of Committee No. 3; it will therefore be the duty of that committee to provide the funds necessary for the carrying out of the act. Should the Council think proper to re-appoint your committee, with instructions to put the act into execution, your committee would desire to have a clear understanding as to whether it can count upon the thorough co-operation of Committee No. 3; if this were withheld your committee and the Council might find themselves involved in serious difficulties. Your committee quite agree with the report of the Law Agent that it would be premature to do more than prepare plans, &c., until provision is made for the necessary funds, which, as pointed out, will be the duty of Committee No. 3. With reference to the question of the exact areas to be dealt with; your committee are still of opinion that the houses fronting Meath-street and Denzille-street should not be taken, except on some guarantee that the premises would be purchased at something approaching their cost to the Corporation. With this view they have caused to be addressed the following letter to the Artisans' Dwellings Company:—

City Hall, Dublin, 22nd September, 1877.

Sir,—With reference to the enlarged areas now included under the Local Government Board (Ireland) Provisional Order, Artisans' and Labourers' Dwellings Confirmation Act, 1877, 40 & 41 Vic., cap. 122, which became law on the 23rd of July last, I am instructed by the Artisans' Dwellings Committee to direct your attention to the first paragraph in their report to Council of 1st June last, copy of which I enclose, and to ask whether your company would be prepared to purchase the sites of the enlarged areas, with the houses thereon, at the amount they might cost the Corporation. The Artisans' Dwellings Committee is taking steps to put the act into execution, but the proceedings are tedious and complex, and will necessarily take a considerable time.

W. J. HENRY, Town Clerk.

Edward Spencer, Esq., Sec.  
Dublin Artisans' Dwellings Company.

Your committee recommend that it be re-appointed, with direction to take all necessary steps to carry that portion of the act contained in the original scheme into execution, and the enlarged scheme into execution, should it obtain a satisfactory guarantee for the recoupment of the increased expenditure, but that no notices be served, or other step actually committing the Corporation be taken, until a further report be presented to the Council and confirmed by it. That Committee No. 3 be directed to take forthwith steps for raising the funds necessary to carry the act into operation. In accordance with the order of Council of 5th day of September last, your committee have directed the Town Clerk to serve notice that the Council may require during the ensuing year a sum not exceeding £40,000 for the purposes of the Act. This notice in no way binds the committee or the Council to take steps to borrow, or to borrow any portion of this sum; it merely provides for any future application for that purpose. The estimate for the enlarged area as shown in the report of your committee, dated 1st June, 1877, and adopted by the Council, is £36,778 10s., and this is the reason your committee find the round sum of £40,000 as probably covering the maximum that could by possibility be required. But your committee, in order

to avoid all possible misunderstanding, would again reiterate that they have no intention of recommending the Council to increase the areas beyond those contemplated in the original scheme, the estimates for which were £17,000, except the Artisans' Dwellings Company, or some other persons or person give a satisfactory guarantee that they will purchase the premises at the price the Corporation might pay for them. Of course if this were done your committee would have no hesitation in recommending an enlarged scheme. Your committee would earnestly impress upon the Council, and through it on Committee No. 3, the desirability of taking immediate steps to carry the act into execution, by providing the necessary funds, and would point out that the small rate necessary for that purpose will be easier borne by the citizens, inasmuch as the Prisons Act (Ireland), passed last session, will relieve them of some sixpence in the pound taxation. All which we submit as our report, this 21st day of September, 1877.

E. DWYER GRAY, Chairman.

The following are the Law Agent's report, and his report of August, 1876, referred to therein:—

Law Agent's Office, City Hall,  
Dublin, 19th Sept., 1877.

#### THE ARTISANS' DWELLINGS COMMITTEE.

Gentlemen,—In compliance with an intimation through the Town Clerk that your committee desired to have a report from me as to the course to be now pursued to carry out the provisions of the Local Government Board (Ireland) Provisional Order Artisans and Labourers' Dwellings Confirmation Act, 1877, I beg leave to report—That by the 9th section of the Artisans' Dwellings Act, 1875, the Confirming Act having been passed by Parliament, it has become the duty of the Corporation, as the local authority, to take steps for purchasing the lands required for the scheme, and otherwise for carrying the scheme into execution as soon as practicable. By the 19th section of the same act the period of time for exercise of compulsory powers of purchasing is limited to three years after the passing of the Confirming Act, viz., in this case to 23rd July, 1880. The steps necessary to be taken for the compulsory purchase of lands are those necessary under the Lands Clauses and Railways Acts (Ireland), and the primary ones are—1st. The lodgment of maps and schedules in the office of the Commissioners of Public Works, and with the Clerks of the Peace and Poor Law Unions. 2nd. The appointment of arbitrator by the Board of Works. 3rd. The insertion of the notices of such appointment, and to treat, and of inquiry by the arbitrator. With reference to the important question of the funds for carrying out the scheme, I beg to refer to my report to your committee of 14th August, 1876, and to add that negotiations for a loan to complete the purchase of the necessary lands should be in the first instance entered on. It must be borne in mind that a deposit (the amount to be named by the Board of Works) probably of £50, must be made when applying for the appointment of the arbitrator. Until the arrangements for obtaining the necessary loan, and so securing the forthcoming of funds to pay for the lands, I consider it would be premature to do more than have maps and schedules prepared. These arrangements, however, involve a good deal—for example, a careful estimate of the value of the premises when acquired, so as to present this portion of the security to be offered for the loan in a tangible and accurate form, and, above all, a definite statement as to the borough fund or borough rate, out of which the interest on the loan is to be paid. JOHN MACSHEEHY.

The Town Clerk, Secretary.

14th August, 1876.

#### COMMITTEE FOR CARRYING OUT THE PROVISIONS OF THE ARTISANS' DWELLINGS ACT.

Gentlemen,—In reference to your inquiry as to the means of obtaining funds for carrying out the provisions of the Artisans' Dwellings Act, and defraying the preliminary expenses of inquiries, plans, schemes, &c., I beg to report that by the 21st section of the act, all your expenditure must be made out of what is to be called "The Dwellinghouse Improvement Fund," and that moneys required in the first instance to establish such fund are to be supplied out of local rates, or out of moneys to be borrowed in pursuance of the act. The "local rates" mean the rates out of which expenses incurred under sanitary acts are authorised to be paid, and are, in the case of Dublin, the borough fund or borough rate. By the 22nd section you are authorised to borrow on the credit of the local rates in like manner as you are authorised to borrow for sanitary purposes. By the 47th section of the Public Health (Ireland) Act, 1874, reasonable cost of a sanitary authority in respect of any provisional



orders in pursuance of the sanitary acts, and of "inquiries preliminary thereto, as sanctioned by the Local Government Board," are deemed to be expenses properly incurred for sanitary purposes, and doubtless proper costs and charges of preliminary inquiries, &c., for the formation of district areas, &c., if sanctioned by the confirming authority, would be deemed to be portion of the purposes of this act, for which the Public Works Commissioners, as authorised by the 22nd section of the act, would grant a loan. Your committee are aware that the borough fund is insufficient for the burthen upon it, and that no borough rate has been struck, so that to constitute a security for any loan it would be necessary to strike such a rate.

JOHN MACSHEEHY.

Since this report was adopted by the committee I have received the annexed letter from the secretary to the Artisans' Dwellings Company in reply to mine of the 22nd inst., embodied in report, relative to the purchase of the enlarged areas:—

DUBLIN ARTISANS' DWELLINGS COMPANY  
(LIMITED).

25th September, 1877.

Sir,—I have laid before my directors your letter of the 22nd inst., asking with reference to the enlarged areas now included under the Local Government Board (Ireland) Provisional Order Artisans' and Labourers' Dwellings Confirmation Act, 1877, 40 & 41 Vic., cap. 122, whether my company would be prepared to purchase the sites of the enlarged areas, with the houses thereon, at the amount they might cost the Corporation. Presuming that your communication refers to the houses 33 to 35 Cole-alley, and the houses 26 to 35 and 38 to 45 Meath-street, all inclusive, with the ground on which these houses are situate, I am instructed by my directors to state that until they know the prices to be paid by the Corporation for this new property, they could not say whether the company would be prepared to take it at such prices. My directors will, however, be prepared, when they know the prices at which the Corporation are willing to dispose of the ground and tenements, to state at once whether these terms are such as the company would think it prudent to give.

EDWARD SPENCER, Secretary.

W. J. Henry, Esq., Town Clerk.

Mr. Gray, in moving the adoption of the report, said that it would be necessary, in order to carry out the purpose of the act, to apply for a loan of £20,000, the interest on which according to the rate fixed by the Board of Works would come to either five or six per cent., representing an annual charge of £1,000 or £1,200 a year, which would be covered by a rate of one halfpenny in the pound. He proposed—"That the report be confirmed; that the present committee be re-appointed, with the addition of the names of Messrs. Mulligan and Bentley, for the purpose of carrying the original scheme into execution, and with power to take all necessary steps for that purpose, but not to serve notices or take such other steps as would commit the Council to a purchase of the houses until the Council order such to be taken; that committee No. 3 prepare a statement of the condition of the borough fund, and if found sufficient that they will take steps to raise the necessary funds to enable the Artisans' Committee to carry out the original scheme; and that in the meantime it place at the disposal of the committee any funds necessary for its purpose, and that application be made for a loan of £20,000 for the purposes of the act."

Mr. Dennehy seconded the resolution, and pointed out that Birmingham had got a loan of the large sum of a million from the Government for the Artisans' Dwellings Company. That being the case, he did not see why their application for a loan should not be favourably received. If it was not, they could not carry out the act, for without a loan they had no funds to meet the expenses.

Alderman Harris, although slow to do anything that would increase taxation, thought that in a matter like this, affecting as it did the moral condition of the people, they should not be considering too closely the question of expense.

Mr. Maclean was opposed to the expenditure of such a large sum on the scheme.

Alderman M'Swiny approved of the scheme, and gave it his heartiest support. He considered it was useless to talk of reforming the habits of the people until they first gave them comfortable homes, the present condition of which was the true source to ascribe all the intemperance and vicious habits of our people to.

Mr. Dawson agreed with Alderman M'Swiny. It was the condition of the dwellings of the poor that led to their high death-rate. Bad smells do not create lung disease: that comes from roofless habitations, rickety staircases, from the want of windows, and from the awful discomfort and terrible

dangers to which the population of this city was exposed. The doctors told them that until they swept 2,000 uninhabitable houses out of existence in Dublin they would have a high death-rate and permanent disgrace among them!

Mr. Murphy was opposed to the scheme. The drifting of this movement was to have a thorough rate, and they wanted to borrow money now when every department of the Council was in a state of bankruptcy. He would ask them were they in a condition, as rational men, to undertake a piece of work of the kind? From his knowledge of Dublin and the houses of the poor people, he was enabled to say there was no want of room. There was plenty of accommodation, but there was a want of something in the people themselves. He could not as a ratepayer support the resolution. He believed in his honour that with a little honest and strict economy, and the proper working of the various committees, they would require no borough rate to do anything.

Mr. Kennedy thought the houses of the poor people were a disgrace to Dublin, and he warmly supported the scheme.

Mr. M'Dermott was opposed to any new taxation. After some further discussion the motion was adopted, the voting being—for, 9; against, 4.

## HOME AND FOREIGN NOTES.

**THE HOWARD MEDAL.**—The following is the title of the essay to which the Howard medal will be awarded in November, 1878. The essays to be sent in on or before June 30th next:—"The Effects of Health and Disease on Military and Naval Operations." The council have decided to grant the sum of £20 to the writer who may gain the Howard medal in November, 1878.

**THE OBELISK MOVEMENT.**—The companion obelisk to Cleopatra's Needle has been offered by the Khedive, says the *New York World*, to the American nation, and an English firm have proposed to undertake the transit operations for £20,000. American engineers, however, are anxious to manage the transport themselves, as they put in a plea for home talent.

Mr. S. W. Kershaw, M.A., the Lambeth Palace librarian, has published some "Notes (antiquarian and historical) on Croydon Palace," one of the most ancient residences of the Archbishops of Canterbury, in the hope that the Church Congress and the public "may be induced to take more interest in the future preservation of the building for some purpose of important local interest."

**GOOD GAS MANAGEMENT.**—The accounts of the Gas Committee of the Manchester Corporation for the past year have just been made up, and show a balance on the year's trading of £100,539 16s. 7d., which is disposed of as follows:—Interest, £15,518 2s. 1d.; liquidation of mortgage debt, £27,729 15s. 8d.; suspension account (which is paid off this year), £8,891 15s. 10d.; reserve fund, £6,266 6s. 8d.; amount handed over to the improvement committee, £42,133 16s. 3d. The average profit for the seven previous years was £30,605, the largest amount realised during that period being £39,410 in 1876. The Corporation Committee anticipate that, having entered into some favourable contracts, which will come into operation about six months hence, they will be justified in reducing the price of gas 4d. per 1,000 cubic feet.

**SERVING THEM RIGHT.**—At the Newry Borough Court, John Kelly, Bernard M'Ilroy, and Patrick Grant were fined 2s. 6d. and costs each for riding on loaded carts. John Rowan was fined 5s. and costs for wheeling a barrow on the footpath. Several farmers were fined 2s. 6d. and costs each for leaving their horses on the street without any persons in charge. Head-Constable Parker stated that he had received directions from a magistrate to prosecute all parties who throw down hay or straw, to feed their horses, on the streets. [It would be well if a few of our D.M.P. would display similar activity in our thoroughfares, where cases of a similar nature to the above are daily to be met with.]

**PROPOSED AMENDMENT OF LONDON BUILDING ACT.**—At the meeting of Metropolitan Board of Works on the 19th ult., Mr. J. Runtz proposed the following resolution:—"That it be referred to the Works and General Purposes Committee to consider and report what amendments are urgently required in the Metropolitan Building Act, 1855, the Metropolis Management Act, 1855, and the Acts amending the same respectively, with respect to houses and buildings, and especially to report what amendments are desirable with reference to the width of roads, foundations of houses, buildings, and erections, and recovery of expenses relating to

dangerous structures, with power to instruct counsel to settle any bill." The mover said he did not propose to go into the question, but he might state briefly that at the present time there was no law affecting the subject of the foundation of houses, and considerable mischief had resulted in consequence of the proceedings of the builders in digging out the gravel, and building on refuse and rubbish. Mr. Selway seconded the motion, and after some remarks from Mr. Dresser-Rogers and Mr. Fell, it was put and carried.—*Builder*.

**THE PARLIAMENT CLOCK TOWER.**—Before the removal of the scaffolding surrounding the clock tower at the Houses of Parliament, the employés engaged on the works met in the clock tower and resolved to commemorate the re-gilding and decoration of the spire by depositing a number of the London daily papers, containing a report of the stoppage of "Big Ben," in the brass receptacle which supports the ornamental vane rod, at an altitude of over 240ft. Accordingly, before the vessel, which is large enough to hold several gallons of water, was sealed, the men assembled on the top tier of the scaffolding and deposited in this curious receptacle copies of newspapers, a list of names of workmen engaged on the tower, a gilders' club hook, a purse containing a small gilt cross, and the following coin:—Sixpence, fourpenny piece, threepenny piece, twopenny piece, penny, halfpenny, farthing, halfpenny, a Dutch coin, and a copy of the verse to which the chimes of Big Ben are set:—

"Lord, through this hour  
Be thou my guide;  
Then, by Thy power,  
No foot shall slide."

The receptacle was afterwards hermetically sealed and the scaffolding removed.

**FALLIBLE ANALYSTS.**—A number of the milkmen belonging to a large town in the West of England having been fined for selling watered and adulterated milk, one of their number, conscious of his own righteousness, applied to the superintendent of the local police to send a policeman to his field to see his cows milked preparatory to sending samples of the milk to the local analysts for examination. The sergeant who was detailed for the purpose filled three bottles with the milk, and sealed them with the constabulary seal, one of them being retained by the police, and the other two being sent to two analysts in the neighbourhood, who charged a guinea each for the analyses. The honest cowkeeper was beginning to crow over his dishonest competitors, when the analytical certificates arrived, one of which declared that the first sample was adulterated milk, and that it had been almost entirely deprived of its cream; while the second analyst declared that his sample had been skimmed, and the greater part of the cream had been taken away. Surely there must be something very wrong in this case; either the analysts' reports are worthless, or the cows must have skimmed and watered their own milk.—*Medical Examiner*.

**CLONTARF TOWNSHIP.**—In the annual report laid before the ratepayers of this township last week, the Commissioners state that they have imposed a sanitary rate of threepence in the pound, which was found to be necessary to meet current expenses for sanitary purposes, as well to recoup the township for the sanitary expenses of last and the previous year, which the ordinary rates were found to be insufficient to cover. The charge of keeping the township roads in repair (always a heavy item of expenditure) amounted last year to the sum of £601. The sea wall has suffered to a great extent by the violent gales of last winter, and the Commissioners had such repairs executed as were absolutely and immediately required for the preservation and making good of the roadway to enable public traffic to be continued—they could not attempt more, not having any funds (the maximum amount of the rates they are empowered to levy on the township being barely sufficient for even ordinary expenses, left nothing for extraordinary charges). And the Commissioners having also failed in an application they made to the Local Government Board for assistance and advice in the matter, they resolved to appeal to the ratepayers for a subscription for the repair of the sea wall, but they are sorry to say with very small success, for beyond the Chairman (Mr. Vernon), Sir Arthur Guinness, and three or four others, no response has been elicited. £465 only have been realised, which sum has been expended in making good such parts of the wall as have been actually thrown down. About £600 more will be required to put the wall in thorough repair throughout; and if this further sum cannot be obtained by subscription amongst the ratepayers, the Commissioners may be compelled to propose such means as are absolutely necessary for the protection of the public interest and the property of the township.



**IMPURE GAS.**—The Commercial Gas Company of London were summoned to answer a complaint laid on behalf of the Metropolitan Board of Works, of having supplied to the public gas of less purity than required and allowed under the provisions of the Gas Act, 1875. There were eight summonses against the company, each laying a complaint for a different day, and the penalty for the offence, under the Act, is £50 a day. On Friday the complaint against the company of the quality of the gas supplied to the public was debated at the meeting of the Metropolitan Board of Works. That body decided, on the report and certificate of the chief gas examiner, that the company were liable, and instructions were given to the solicitor to at once take proceedings. Mr. Spencer made application on behalf of the Board of Works to the magistrate at this court at the last moment on Saturday afternoon. Mr. Bushby, after looking into the private Act of the company, thought that under Jarvis's Act he would not be justified in doing that, as the company ought to have the opportunity of being heard. Mr. Spencer said that the company had a right of appeal to the Board of Works against the report and certificate of the gas examiner. It was frequently done, but in this case there had been no appeal, and the company were liable. All that was required under the Act was to give proof of the report and certificate. The gas examiner was an independent public officer, standing between the company and the Board of Works. Mr. Bushby thought that there was much objection to the summary proceeding of issuing a warrant of distress for the recovery of £400 against a company. The summonses were then adjourned, the secretary of the company stating that the matter would be fought out.

**DUNDALK, AND ITS MUD.**—The local *Democrat* loses no opportunity of calling attention to the ill-kept streets of its town. From what we know of the state of matters between the Town Board and the County Surveyor, we are disposed to think the board should be held responsible for the clearing of the streets of this important market town. Steps should, however, at once be taken for the purpose of settling the dispute, and placing in the hands of the commissioners everything connected with the wants of the town. Read what our contemporary says in his issue of Saturday:—"Strangers coming into Dundalk are amazed at the condition in which the streets of such an important and improving town are kept. Commercial travellers declare that in no other city or town in Ireland—not even in 'dear, dirty Dublin'—do the streets present such a disgraceful appearance as those in Dundalk. The roads leading to the town would bear a favourable comparison with those in any other county in Ireland, but the moment a traveller enters the town he finds the mud splashing about as he drives through the principal streets. He sees small ramparts of mud at intervals across the streets, created by persons who have swept the mud on either side in making passages for themselves or their customers from one side of the street to the other. If he asks (as naturally he will do) why are the people of Dundalk, and all those whose business brings them into it, subjected to such annoyance and inconvenience? he will be told that we are *blest*—or rather *cursed*—with a hody called Town Commissioners, and a County Surveyor, who, during the past twelve months, have been contending whether it is their or his duty to keep the streets clean, and that while they and he have been thus engaged in contention the people have been left to wade through the mud as best they can! A stranger in Dundalk would regard such an explanation as almost incredible; but it is, unfortunately, strictly accurate!"

**CLEOPATRA'S NEEDLE.**—WHAT WILL HE DO WITH IT?—Does Egypt owe us a debt of gratitude? Have we not profaned her sanctuaries already by unhousing her dead rulers, her princes and princesses, and exposing them to the rude gaze of a curious and gaping crowd? We have stolen away her mummies, which had been embalmed and preserved with reverent love, immured in those Pyramidal erections which were supposed not only to withstand the march of time, but the inspection of the curious. Embalming was resorted to in the hope of preserving the bodies until the time of a resurrection, when their dried-up frames would be re-animated, and enjoy the pleasures of the celestial world, pictured by their priests. But alas for the vanity of human wishes, and for the instability of human foresight! Science held little reverence for posthumous expectations, little respect for a mummy, whether it were the veritable remains of a Ptolemy, or a Sesostris. She only cared to throw light on anatomical differences, on race, and the effect of time in producing structural alterations in the human family, and she ruthlessly invaded those sacred precincts, and carried off to the home of the

antiquarian and the naturalist, a queen or a princess, to touch whom in life would have been death. Medical men have been prominent offenders in this respect, and we have now to add to the list the name of our *confrère* Professor Erasmus Wilson, whose achievements in transporting from its home on the Nile the famous needle of Cleopatra will be handed down to generations unborn. The vision of Tam O'Shanter in the Kirk must have been a mere bagatelle to what took place on the eve of the departure of the obelisk, and only Gustave Dnré could represent the midnight meeting of the dead queen's court, and the wails of the mighty shades over this act of sacrilege. However, in spite of Apis and Osiris, of the Ibis and the Ichnumon, of gods and men, the deed has been accomplished, and London will soon possess another antiquity, the use of which has not been known, and the use of which in future will be even less so. The question of a site is yet a matter of dispute, but whatever difference of opinion there may be regarding it there can be no question as to the liberality and generosity of Professor Wilson in presenting it to the nation; whilst the engineering skill displayed in conveying it to England must be reckoned as one of the achievements of the age.—*Medical Press.*

### TO CORRESPONDENTS.

**LEINSTER LAWN.**—Correspondents who have written on this subject will see that the matter is treated elsewhere in our columns, from more points of view than one.  
**A GAS CONSUMER.**—The question has been ventilated for years, and if consumers and ratepayers do not combine for their own interest, or use their senses individually, they deserve no public sympathy.  
**PROVINCIAL ARCHITECT.**—The design, as a drawing, is good; but as a design *per se*, we would not advise its publication.  
**F. I.**—The verses are scarcely up to the mark. You have written much better and more pointedly on former occasions.  
**RECEIVED.**—W. (the correspondence has already appeared in several papers.)—T. D. (omitted for the same reason).—C. E.—B. A.—Artisan—P. L. G.—R. D. S., &c.

### NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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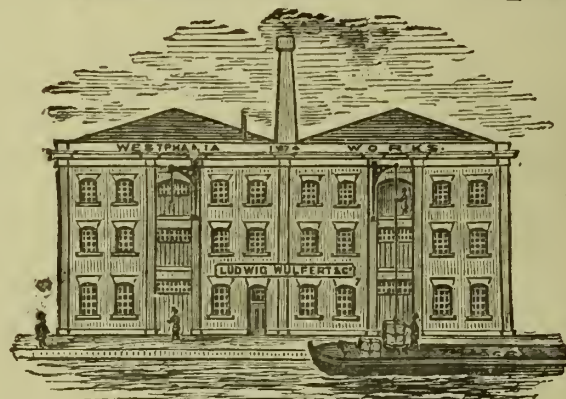
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Illustration.

HEREFORD CATHEDRAL.

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THE IRISH BUILDER.

VOL. XIX.—No. 430.

THE NEW ROYAL DUBLIN SOCIETY AND THE SCIENCE AND ART MUSEUM.



WHILE there was yet time, we freely and conscientiously expressed our views upon the defects of the Government scheme; but the time is now past for expostulation. Time will tell

whether we have been mistaken or not. None could be greater and warmer advocates for the establishment of an Irish Museum of Science and Art, in accordance with a well-regulated scheme; but we could not agree *in globo* to the scheme formulated in the interest of the Science and Art Department. The Government has acted in some things as well as could be expected; but it has now got a firm grasp of an old native and historical society, and the society will henceforth in many ways be powerless and dependent, instead of powerful and independent, and a worthy representative institution of the country.

On the 8th instant, a stated general meeting of the members of the Royal Dublin Society was held to elect the honorary officers, to receive a report recommending the amalgamation between the Agricultural Department of the Royal Dublin Society and the Royal Agricultural Society of Ireland, and submitting the names of the members eligible for election as trustees of the National Library, to confirm certain bye-laws, and to elect new members. We annex the report, and it is only necessary to add that the purpose of the meeting was attained, and the amalgamation project adopted. Pressure of other matter prevents us from making some remarks on certain features in the following report:—

In accordance with the agreement entered into with the Government, the principal conditions of which are embodied in the "Act for the establishment in Dublin of a Science and Art Museum and

the development of the Library of the Royal Dublin Society into a National Library," the property of the society in land, buildings, and collections has passed into the possession of the Government. The society will, in accordance with such agreement, receive the sum of £10,000, which will be invested in such security as, subject to the approval of the treasury, may be selected. It will continue to be provided with the requisite accommodation in Leinster House; the members will have free access to the several departments as heretofore, whilst the existing members, as well as all those who shall be admitted before 1st January next, will have the right to borrow books from the National Library.

In order to assist in the more complete development of that part of the society's work which is devoted to the promotion of science and the useful arts, it has been arranged that all the scientific serials and transactions of learned societies, as well as all duplicates in the Library, shall remain the property of the society. The lecture hall and laboratory will be reserved for its use, and the collections in the Botanic Garden and Museum of Natural History will be available as formerly for the illustration of papers read before the society.

The most important condition, however, for the successful prosecution of the society's scientific work, pure as well as applied, is that for five years the cost of printing of the scientific papers read before the society will be defrayed by the Government.

Concessions equally favourable have been obtained or the agricultural department; thus, in lieu of the premises around Leinster House, which will be required for museum buildings, &c., the Government has undertaken to provide accommodation for agricultural shows elsewhere, and to reimburse the society for any pecuniary loss it may sustain in consequence of the change of site from the city to the suburbs. It may here be mentioned that the site already determined upon for future agricultural shows is a large field in the neighbourhood of Ball's Bridge, where a show of the Royal Agricultural Society was held some years ago.

In order to develop the scientific work of the society, and thus secure to the fullest extent the great advantage of having the scientific papers read before it, printed free of cost, the Committee of Science have submitted a scheme for the complete reorganization of the department under their superintendence. Thus the meetings for the discussion of subjects connected with science, pure and applied, will be held in three sections. I. For the physical and experimental sciences. II. For the natural sciences, including geology and physical geography. III. Science applied to the useful arts and industries.

The papers to be read at these sectional meetings to be published in 8vo, as the scientific proceedings, the more important to be published in 4to, under the title of "Transactions." In order to consolidate and economise both work and time, other scientific bodies have been invited to associate themselves with the work of the sections, the meetings of which will be held simultaneously on the third Monday of each month, an invitation to which the Royal Geological Society and the Scientific Club have responded.

A special committee is now engaged in considering the measures most advisable to adopt with regard to the future of the society, so as to maintain it as an object of attraction to the educated classes, and a preliminary report has been presented to the council, in which it is advised that, in addition to the more complete organization of the scientific department, steps should be taken to render the reading-rooms more efficient; to establish a lending library for the use of future as well as present members; to arrange for the delivery of lectures for the elucidation of the latest discoveries in science; and to hold occasional *conversazioni*.

According to one of the conditions contained in Lord Sandon's letter of the 9th February, 1876, the National Library will be placed under the superintendence of a council of 12 trustees, 8 of whom are to be nominated by the Royal Dublin Society and 4 by the Government. It is to be observed that, in recognition of the munificent gift by Dr. Joly, of his library, consisting of 20,000 volumes and 10,000 rare prints, he has been named in the Act of Parliament as a member of the council of trustees.

The Government having requested the appointment of the society's trustees, the council have taken preliminary steps with that object, and the library committee have at their request furnished them with the names of ten members whom they consider eminently fitted for such office. To these the council have added the names of eight, and the council propose that the society, at a general meeting to be specially convened, shall select, according to the mode by which the standing committees are now chosen, eight names from such list

(which is now submitted), the members to have the right of replacing any or all such selected names by others they may consider better qualified for the office. The council consider that in the future a certain number of such trustees should retire annually, but be eligible for re-election; and on another occasion they will submit rules for the conduct of such future elections.

The die is cast, and we hope the members of the new Royal Dublin Society (exclusive of those who are interested in honours and appointments) will in a short time be as satisfied with the working of the new body as they were with that of the old. Some or several members will, we have no doubt,—in combination with hundreds of their countrymen outside the ranks of the society—have occasion before many years to exclaim with the old Irish proverb, that "a bird in the hand is worth two in the bush." The bird in the hand, however, has flown: it was an Irish bird, and it is to be feared it will take a long time before the feathered tribe of the South Kensington aviary can match it, taken singly or in chorus. Metaphor aside, we have contended all along for nothing more than for what Lord Charlemont contended when he said—"Ireland should be served in Ireland."

NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

TENTH PART.

AN architectural work of more than ordinary note appeared in the last decade of the last century, which, though printed in London, was jointly published in this city. This work, which calls for more than a passing notice, is now becoming scarce, and is briefly known as "Malton's Views of Dublin." Its full title is, however, as follows:—"A Picturesque and Descriptive View of the City of Dublin, Delineated in a Series of most Interesting Scenes, taken in the year 1791. By James Malton. With a Brief Authentic History from the Earliest Accounts to the Present Time." According to the preface, though the views were all taken by Malton in 1791, yet the work was in hands till 1797. A reference to the plates, however, shows that some of them were issued as late as 1799, so the work was longer in hands than the time stated on the preface. Though each of the plates in the work is separately dedicated to distinguished public men in some cases, and to public bodies in other instances, yet the work, as a whole, commences with a general dedication as follows:—"To the Right Honourable the Lord Mayor, Aldermen, Sheriffs, Common Council, Freemen, and Citizens of the City of Dublin, this work, intended to contain a Concise, yet Complete Description of the Capital of Ireland, is humbly Dedicated and Given to their Protection by their Obedient Servant, James Malton." This ornamental dedicatory frontispiece contains the old City Arms. Preceding the regular views there are maps of Dublin in 1610 and 1797. The former appears to be a copy of Speed's well known map, but it is laid down according to Malton in an improved manner, and giving the supposed original form or plan of the Castle as it stood in 1610. On this plate we have also two ancient seals of the City of Dublin, one dated 1459. There is also a map giving "A correct Survey of the Bay of Dublin, 1795."

In his description of Dublin, the author having in one place stated that the width of the bay was eight miles, and in another place six miles, he resolved during the course of the publication to give the last-named map correctly laid down. He followed the nautical survey of Bernard Scale and William Richards, taken in the year 1765. The authorities followed in the "Brief History of Dublin" accompanying "Malton's Views" were: Harris's "History of Dublin," Leland's



"History of Ireland," Hume's "History of England," Des Cartes's "Life of Ormond," Ware's "Bishops of Ireland," Archdall's "Monasticon Hibernicum," and Pool and Cash's "Views of Dublin." Accompanying each of the views of the buildings given in the work there is a short letterpress description, and at the head of the page with each dedication is given the arms of the different personages and bodies to whom the plates are respectively inscribed.

Though the publication of Malton's work occupied some years, he tells us in his preface:—"Such alterations as occurred in each subject between the taking and publishing of any view of it, have been attended to, to the end that it might be as perfect a semblance as possible of the original at the completion of the work. The particular description accompanying each view have not only shortened the history, but have occasioned a more minute detail of the structures than could have been given by pursuing a different plan, at the same time making the whole more interesting. Of such parts of the architecture of the buildings, as the views of them immediately express, no mention has been made; as to persons informed in architecture it would be superfluous, and to the uninformed in that subject impertinent. It has also been avoided in the description of the various structures, passing censure on any contiguous deformity, from the reflection that the blemish might be temporary, and not cognisable in a work like this." The scenes and sights depicted of old Dublin life and fashion, cleverly introduced here and there in several of the plates, are really interesting and instructive studies.

Following the plates as arranged in the copy of the work before us, the first gives a view of the Great Court-yard, Dublin Castle. This plate is dedicated to the Viceroy at the date of publication—To his Excellency John Earl of Westmoreland. The imprint here is, "London: Published according to Act of Parliament, July, 1792, by Jas. Malton and George Cowen, Grafton-street, Dublin." The Dublin publisher figures in Wilson's Directory of the day as "a glazier and printseller," and he resided for several years at 84 in the above-named street.

In Malton's views of the Court-yard of Dublin Castle, the old and handsome tower and spire of St. Werburgh's can be seen, which existed till 1810, when it was taken down, as it was considered dangerous, being out of perpendicular. Francis Johnston, the architect, undertook to secure it, but the inhabitants being alarmed, insisted on its coming down. The artist presents in his view an attractive sight in the Castle Yard, including officers, soldiers, sentries, civilians, rank and fashion, and a goodly number of playful dogs.

The plate of the Parliament House bears date 1793, in which more than half the view of Trinity College is introduced. This plate is dedicated "To the Right Honourable John Foster, Speaker, and the Right Honourable and Honourable the Members of the House of Commons of Ireland." The scene in College-green introduced by the artist is a lively one, and characteristic of the time in dress and habits. Here we have equipages, ladies and gentlemen, horsemen, busy pedestrians, country carmen, city hawkers and carriers of both sexes, and dogs in number in different attitudes, some amusing themselves or their owners, and more worrying each other for the fun of some interested folks not far distant.

The plate illustrative of Trinity College bears date the same year, and in the view are introduced some of the old houses at the angle of College-green and up a portion of Grafton-street. Pictures of high and low life, passenger and vehicular traffic are in this view also. The plate is dedicated "To the Right Honourable the Provost, Fellows, and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin." The plate representing the interior view of the College Library, bearing date the same year, is dedicated "To the Right Honourable

Edmund Burke, Member of the British Parliament for the Borough of Malton." The artist brings into his view here personages connected with the College and other visitors and readers.

The plate of the Provost's House bears date 1794, and is dedicated "To the Right Honourable John Hely Hutchinson, Secretary of State, Provost of the University of the City of Dublin." Some interesting scenes in the street without are here introduced by the artist, ladies and gentlemen, arm in arm and apart, dressed in the costume of the time; equipages and loaded low-back country carts. The angle of a house at the corner of Suffolk-street is brought into view, exhibiting a portion of its antique shop-front architecture, signboard, and projecting oil lamps. It appears to have been a lottery office. The angle of the house at the opposite corner of Grafton-street is also brought into sight exhibiting the name of the street on the wall of the house, and a posted play-bill on which may be deciphered "Theatre, Smock-alley, Benefit of Mr. Ryder," and at the bottom of the poster "Bucks have at ye All." Standing on the flags right under this poster there are two men, one apparently a dealer with his basket on his arm, or perhaps a gentleman's servant, and the other some town "buck" or country cousin, holding a riding whip or stick in one hand while challenging the dealer's attention with the other. The two worthies, whatever may have been their argument or dispute, are very humorously represented. In the street wall in front of the Provost's house, but near the Nassau-street end of it, there is a representation of what appears to be very like a cobler at work in his "bulk" or little shed. A perspective view of the front and a greater portion of one of the sides of Trinity College is introduced into the plate devoted to the Provost's House.

The plate of St. Patrick's Cathedral represents a view taken in the south-east direction; it bears date 1793, and is dedicated "To His Grace Robert Fowler, Lord Archbishop of Dublin, Metropolitan and Primate of Ireland." Here we have some grave persons, and some the reverse of grave, depicted. Visitors or artists or antiquaries gazing on the architecture of the building from the churchyard within. One group represents a grave-digger resting his pick upon a flat slab, and holding converse with a man, who in a half kneeling posture is seemingly giving some particulars about the grave or tombstone beneath them. A woman with an infant in her arms forms the central figure of the group. In another portion of the graveyard is seen a man half reclining upon a flat but somewhat elevated tombstone, evidently resting himself. His dog, which has its two four paws elevated on the slab while his hind ones are resting on the ground, is watching his master with evident pleasure. The dog has in all likelihood been scampering over the graves and comes back to his master out of breath, for the animal's tongue is protruded. Malton shows a ball upon the top of St. Patrick's, but we are not quite sure, as we write, whether the old ball that was on the spire was not blown down before the artist took his view. The plate representing the west front of St. Patrick's Cathedral bears date the same year, and is dedicated "To the Right Reverend Dr. William Craddock, Dean, and Reverend the Chapter of the Cathedral Church of St. Patrick, Dublin." Some old gabled houses of the Queen Anne or early George period are brought into the view, and cattle drovers' and hutchers' sheds. Among the pictures of street life, there is a blind beggar, hareheaded, with his staff in one hand and his hat in the other. The mendicant is placed standing with his back to the wall of a corner house, on which we may clearly discern the name of the street in the words "Cross Puddle."

The plate representing the Royal Exchange (now City Hall) bears date 1792, and is dedicated "To the Masters, Wardens, and Brethren of the Fraternity of Merchants or Guild of the Holy Trinity of the City of

Dublin." This plate, besides affording a good view of the building, embraces a large portion of Dame-street on either side, its shops and street life. In fact the view extends as far down the street as Trinity College. The view is taken from the north-west angle of the building, and the entrance to Parliament-street is brought in, as well as the corner house on Cork-hill. The artist has, we think, been very successful in this picture in giving the fine front of the Royal Exchange, one of its sides, and an excellent representation of Dame-street, full of life, business, and fashion, during the era of the Irish Parliament.

The plate of the Custom House bears date 1792, and is dedicated "To the Right Honourable John Beresford, Chief Commissioner, and the Honourable the Commissioners of the Revenue of Ireland."

In the copy of Malton's work before us the plates are not arranged according to the order in which they were originally issued, for the first number or part of the work issued contained, along with the old map of the city in 1610, and some seals already mentioned, the four following plates:—1st. The Great Court-yard Dublin Castle. 2nd. The Custom House. 3rd. The Royal Exchange. 4th. Leinster House. Malton's view of the then new Custom House is well drawn, giving the whole extent of the front, and a portion of the side. The picture embraces the quay and the river in front, with some of its shipping, sailors, watermen, and with personages aboard and ashore. The notable Chief Commissioner Beresford, to whom the plate is dedicated, is stated, in a contemporary work, to have been the first who "suggested the idea of this noble building fixed on a man of talent, Mr. Gandon, to conduct it, and with indefatigable perseverance brought it to a conclusion."

The plate of the Tholsel or Corporation building that existed in Skinner's-row, now Christchurch-place, up to the early years of the present century, is dated 1793, and is dedicated "To the Right Honourable the Lord Mayor, Aldermen, Sheriffs, and Common Council of the City of Dublin." As this is one of our old public buildings which has long since disappeared, and of which Malton's representation is the only one we are aware of existing or accessible, an examination of the old engraving would afford many of our young and old citizens much pleasure. It was erected in 1683. It must have been a picturesque old building to look at, but despite of what the artist or his editor says about its Gothic appearance, the old Tholsel had very little of the Gothic style about it. It was heavy Classic, very heavy in some features indeed. Two statues stood in niches on either side of the central window in the second storey—Charles II. and James II. These, after the building was taken down, were removed to Christ Church Cathedral. The old Tholsel was very Wren-like in its architectural design. The old houses and shops that existed on either side of the Tholsel in the last century are brought by the artist into his view, including the entrance into Ram-alley. A chandler's shop flanks one side of the alley, and there is a tablet on the front of the house, between the drawingroom windows, on which there is a representation of a cock or some other bird. The entrance to Nicholas-street, and the shops at the corners, are shown. The view extends four or five houses up High-street. What appears like a bit of Christ Church Cathedral on the opposite side is projected in shade into the picture. A fair dame or domestic is looking out from a raised window-sash in the chandler's house already mentioned, a group of talkative women outside, the old sedan chair and chairmen, coaches, and ladies of fashion in the streets, lawyers, clients, basket women and others out and about the old building are well depicted. The old Tholsel, it may be remarked, was devoted to legal business and merchants' business, as well as strictly corporate matters, the building having several courts and chambers for the purpose.



The plate of a "View of the Law Courts, looking up the Liffey," bears date 1799, and is dedicated "To the Right Hon. the Lord Chancellor and Right Honourable the Lord and Barons of his Majesty's Courts of Law, Ireland." It is a good and picturesque view, embracing the Four Courts, the river with some craft and rafts and boatmen, and the vista extends a considerable way up the river. On the south side many old buildings are brought into the picture overhanging the river, and extending a long way up the stream. The quay on the Law Courts side of the river is made a lively scene, with passenger and vehicular traffic, the swift wheel of fashionable equipages, and the slower movement of weighted merchant's wagons and country carts.

The plate of the Old Soldiers' Hospital, Kilmainham, bears date 1794, and is dedicated "To the Right Honourable General Cunningham, Commander-in-Chief of the Forces in Ireland, and Master of the Royal Hospital of Kilmainham." The view exhibits the north front, with a portion of the side looking towards the river. A large extent of the grounds, with its avenues and trees are along with the governor's house brought into the picture by the artist, and as usual he enlivens his representation by personages and other objects imagined or seen at the time.

The plate of the Royal Infirmary, Phoenix Park, bears date the same year, and is dedicated "To the Right Honourable and Honourable the Commissioners of the Royal Military Infirmary in the Phoenix Park, Dublin." This view was taken by the artist shortly after the completion of the building, and it exhibits the state the grounds were then in. There is plenty of foliage introduced, and we have horsemen, gentlemen riders, soldiers, and an aged couple not unlike mendicants, the woman sitting by the roadside, and the man standing behind, one or both being addressed by the sentry on duty.

The plate of the Blue Coat Hospital bears date 1798, and is dedicated "To the Right Hon. the Governors and Trustees of the King's and Blue Coat School, Oxmantown, Dublin." The view shows the building as the architect, Thomas Ivory, intended it should be when finished; but Dublin readers are aware that the central tower was never completed up till the present time. Malton's representation is well rendered. In front of the building, on the green, we have depicted a number of soldiers or sentries being put through their drill; a drummer resting himself upon his drum, with another soldier beside him, both watching their comrades; coaches drawn up outside the building, and the coachman, in waiting, views from his seat with evident pleasure the soldiers. A lady of fashion with her high waisted dress and head gear carries a fan, and is accompanied with her young daughter, and altogether the scene in Oxmantown-green is a sprightly one.

The two plates—the "Lying-In Hospital and the Rotundo and New Rooms"—are dated 1795, and are both dedicated "To the Right Honourable and Honourable the Governors and Directors of the Lying-In Hospital, Great Britain-street, Dublin." The Hospital vie embraces a portion of the Rotundo building, and a portion of the houses in Cavendish-row and Upper Britain-street, with the angle of a house at the corner of Sackville-street. The old public fountain that stood in Great Britain-street, near to Cavendish-row, is brought into the picture. The street scene is made attractive with horsemen, pedestrians, coaches, and other old forms; old public and private one-wheeled and two-wheeled, and two-horsed and four-horsed vehicles, then in fashion; sauntering gentlemen and ladies, with their children and pet dogs, dressed in the old costume; sedan chairmen; mendicants, bareheaded, at the street corners, at their accustomed stand; working men and dealers, sight-seers of both sexes, and other street objects, enliven the artist's two pic-

tures. The second plate, devoted to the enlarged representation of the Rotundo and New Rooms then building in Cavendish-row, gives a vista of the thoroughfare up and above Palace-row, a glimpse of a portion of the garden and railings, and old oil lamps. The houses on the opposite side, extending up the row, are also shown in the shade.

The plate of St. Catherine's Church bears date 1797, and is dedicated "To John Earl of Meath, Lord Brabazon, and Inhabitants of St. Catherine's Parish, Dublin." On the left side as you look upon the picture, an adjoining public-house is brought into his view by the artist. There is a signboard represented on the wall, with a glass surmounting the following words:—"Rum, brandy, mead, whiskey, arrack, wholesale and retail." The name of the publican of that day, Denis Plunket, is painted on the fascia board over the door, with a harp surmounted by a crown in the centre, dividing the christian and surname into two parts. Two men are on horseback outside the door, and one holds a glass in his hand, and is about taking his stirrup drop. The worthy landlord or his waiter is emerging from the shop bringing out another glass of the "cratur" for horseman number two. A dog sits resting itself near the entrance door, seemingly interested with what is taking place. The lower sash of a window over the shop is raised, from which a lady looks out on the scene below. Probably the artist intended the lady to represent the publican's wife. A portion of the houses on either side of the street, looking up towards James's-street, is given in the view. The street scene shows country low-back carts, brewers' drays, coaches, ladies and gentlemen, work people, dealers, children, women drawing water from a public fountain, fighting dogs, and other objects.

The plate of the Marine School, Dublin, looking up the Liffey, is dated 1796. In this view a number of craft unrigged and full rigged are shown in the river; the Custom House appears in the distance, and a long length of the line of quays on the south exhibiting much business, trade, and bustle. On one side of the Marine School building a ship is shown upon the stocks in a ship-building yard. Between sailors, quay workmen, cart men and coachmen, men on horseback and other men working or letting it alone, the scene depicted by the artist is suggestive and picturesque.

The plate of Leinster House—for many years the Royal Dublin Society's house—bears date 1792, and is dedicated to its then owner, "To His Grace William Robert Duke of Leinster and Viscount Leinster, of Taplow, of Great Britain." Although this view only represents the building and court-yard with entrance gate, the artist could not resist his tendency to the picturesque by introducing other objects. A coach is represented entering the court-yard, a gentleman on horseback talking to another gentleman, a lady and children at the door of the mansion, with a pony in waiting outside, a lady looking out of one of the windows on the scene below, and another lady coming out from one of the side entrances of the mansion, &c.

The plate of Charlemont House, Rutland-square, is dated 1793, and is dedicated "To the Right Honourable Viscount Charlemont, Baron Caulfield, and Knight of St. Patrick." This is a very picturesque view, owing to the artist bringing into his picture several of the houses in Palace-row, a portion of the Rotundo Gardens opposite, with the old lodge within the railings; the recess in the latter where existed down to our own time a station for sedan chairmen. The sedan chairmen and chair are brought into the picture, soldiers and officers on horseback outside his lordship's mansion, ladies and gentlemen of fashion walking on the footways, and coaches drawn up outside the houses of their owners.

The plate of Powerscourt House, William-street, is dated 1795, and is dedicated "To Richard Lord Viscount Powerscourt, of Powerscourt, in the County of Wicklow, and Baron of Wingfield." This view embraces

several houses, extending down the street towards St. Andrew-street. The entrance to Coppinger's-row is shown, and the old Assembly House at the opposite corner, where the Corporation used to meet after the taking down of the Tholsel building. When Malton took his sketch a shop existed in this house, for he shows a shop window in that part of the building he brings into sight next to Coppinger's-row. Over this shop window is painted "Fruit Warehouse," and fruit is represented inside the window. The street scene is made animated, as in other views, by the introduction of ladies, gentlemen on horseback, carters, and other business folk in suggestive attitudes.

The plate representing the view from Capel-street looking over Essex Bridge is a very picturesque and comprehensive one, for it embraces a large number of objects, and the artist himself was not wrong in saying that the view exhibits "one of the most striking scenes which Dublin in its internal effects furnishes." Old Essex Bridge is shown as it existed in the last century, with its alcoves within the line of balustrade resting on the piers, the old oil lamps, the shipping and coal vessels that used to come up to this bridge before Carlisle Bridge was erected, the old Custom House, a portion of the quays of the south side, Parliament-street, and the Royal Exchange in the distance, are brought into the view. The two corner houses and shops on either side of the entrance to Capel-street are exhibited as they stood in the last century. Those on the left looking towards the bridge are lottery offices, as their names and signboards attest. The signboard on the wall of one says—"The Military State Lottery Office. By Appointment," and the other—"The Old State Lottery Office," with a harp underneath. In addition to the sign affixed to the front of the first-named house, the fascia board over the shop tells it is a lottery office, and the owner bears the name of "Burton."

Looking out from a raised window sash over Burton's lottery office, the artist has depicted a lady or lady's nurse with a child in her arms, and the scene in the street below is certainly one to attract attention. Two ladies of fashion are in converse, looking into Burton's office; and a gentleman is coming out through the door. A bare-headed and barefooted lad sits on the door steps with a basket beside him, and passing the door of the companion lottery office, the nearest to the bridge, a young and tidily-dressed woman is passing with a basket of wares or eatables on her head. Opposite this office a gentleman on horseback has drawn up, and is addressed by another standing on the kerbstone of the footway. In the street, on the opposite side of the horseman, a mendicant, bareheaded, barelegged, with his staff in one hand and his hat in the other, supplicates alms. On the opposite corner of Capel-street, one house and shop is shown, with a portion of another, and over the door of the angle house "Boot and Shoe Warehouse" may be deciphered. Higher up on a signboard between the drawingroom windows a large boot is represented. On the footway in front of these shops we have a gentleman with his son, and a lady and her young daughter; a bellman dealer with his dog while crossing the street towards the bellman is a basket-woman with her son. Several of the personages we have described are attracted by the sight of some cavalry turning the corner of Upper Ormond-quay and proceeding over the bridge towards the Castle. Coaches are moving either way over the river, lamplighters are lighting the old oil lamps upon the bridge, barrow men and business men and women and boys are out and about, and the canine species, of which there is a sprinkling, are moving and scenting hither and thither. The old Dublin houses brought by the artist into his view are worthy of study. The plate is dedicated "To the Right Honourable and Honourable the Commissioners of Paving and Lighting."

The view of St. Stephen's-green is dated 1796, and is dedicated "To the Right



Honourable David Latouche, and Noble Lords and Gentlemen, the Inhabitants of St. Stephen's-green." Into this view the artist has introduced beves of ladies, and more than one brace of gentlemen,—gentlemen arm in arm with ladies, and gentlemen "bucks" arm in arm by themselves, but looking and ogling askance the fair ones. Other personages of both sexes are scattered about over the green within, ago and youth, dogs and cattle. The scene is in a great part a sylvan one, as trees in leaf are depicted of a pretty good size, together with the shrubs on the plantation and the statue in the centre of the green. The houses on the south side of the green are brought prominently into the picture, and principally the lofty mansion of John Whalley, otherwise "Buck Whalley" (now the Catholic University). When Malton sketched the green it was enclosed by a low wall, and from a carriage-way around, there was a largo gravelled walk, which made the circuit of the green, from which it was divided by a fosse or sunk fence. The dress and costumes of the ladies and gentlemen of Dublin in the last century may be well studied from Malton's view.

The plate of the Royal Barracks is dated 1795, and is dedicated "To the Right Honourable and Honourable the Lords and Gentlemen Governors of the Barrack Board, Dublin." The view is taken from the burial ground behind St. James's Church, James's-street. It brings the whole front line of the block of buildings into the picture, the roadway in front, the old conduit, the river, and the meadow lands that then existed along the Military-road, on the south side of the river. Where buildings and factories now exist, meadows and haymakers, cattle grazing, and trees and brushwood, and other objects are seen.

The plate showing a view of Dublin from the Magazine, Phoenix Park, bears date 1795. It is taken from an eminence in the Park by the draw-bridge of the Magazine. The view embraces the city in its greatest length, nearly due east; indeed it embraces a large portion of the then suburbs. The principal domes, spires, steeples, and cupolas, and other prominent objects of the then city are shown in the view, with portions of the Park grounds and the distant Wicklow Mountains. The winding Liffey, with some of its bridges, is also well depicted; and on the south side of the river, as well as on the north, several prominent objects are brought into sight. The view is an excellent one, for in it city and country are combined—rural life and city life, nature and human nature. This most attractive view is appropriately dedicated "To the Right Honourable Henry Grattan, Member of the Irish Parliament for the City of Dublin." The next and last plate we have to notice is divided into two parts which answer as keys to the two preceding plates. The names of the various buildings and other prominent objects depicted are here mentioned in detail, and numbered for reference. In a word, this last plate or engraving in outline is the key to the panorama of the old metropolis and its principal objects of interest in the last century. The artist waxes enthusiastic in his letterpress description of the view of Dublin from the Park, and remarks:—"Were Ireland happy in the possession of her affluent sons, whose ample revenues derived from her contribute to enrich her rival sister, Dublin would soon be in a condition to vie with any capital in Europe; nature has done her part; there is wanting the finishing hand of art only to render the whole complete." Dublin, it may be truly said, never looked so respectable as she does in Malton's views. The artist would make anyone fall in love with her, his views are so bright and picturesque.

Of Malton himself we have not any particulars to add, as we do not remember meeting his name in connection with any similar work. He came to Dublin at a good period, when there was a rich resident nobility and gentry, and his work appears to have met with a fair share of patronage. He tells us in his preface, "being experienced in the

drawing of architecture and perspective, he has delineated every object with the utmost accuracy." Some may be inclined to find fault with his perspective, and think that he has introduced more into his views than could be seen from any stand-point. On the whole, we cannot but award praise to Malton for his successful rendering of our old public buildings and sights in Dublin at the close of the eighteenth century. With correct architectural elevations he has mingled true pictures of high life and low life in the streets and fields harmoniously together. His picturesque sketches will have a greater value in years to come, for they will afford reliable materials for the antiquaries, artists, and local historians of Dublin.

## IN MEMORIAM.

### THE M'ANASPIES.

A clever yet eccentric artist, who

For fifty years was known in Dublin city,

We'll see no more!—he passes from our view,

And kindly voices utter, "More's the pity!"

Though faults he had, his merits were not small,

Through his long life, well mixed with toil and sorrow,

His face and form old friends will oft recall

For many a long to-morrow and to-morrow!

Two brothers once there were, of kindred tastes,

With hopeful hearts, and brains with projects teeming;

They came to Dublin from our Northern wastes,

Of Schools of Art and mighty workshops dreaming.

They thought and toiled, they preached with tongue and pen;

Men called their work a "craze," because, in trying,

They failed to win the prize that cunning men

Who picked their brains had won, by fraud and lying!

Peace to your ashes, M'Anaspie, Tom!

And to your big-brain'd brother, Patrick, sleeping

In his cold grave these years, long taken from

Your side, and others left behind him weeping!

A schoolboy in my teens I've known you both;

In manhood, too, at home and o'er the billows.

To help your aims for Art I was not loth,

Poor, wronged, and baffled artists 'neath the willows!

London, November, 1877.

C. H.—r.

## DEATH OF MR. THOMAS M'ANASPIE.

SINCE our last issue has occurred the death of an old and well-known citizen who, despite some oddities and eccentricities of character, possessed a considerable share of general knowledge, as also practical skill, in connection with his profession and its cognate branches.

Originally there were two brothers associated in the conduct of the firm, but Patrick M'Anaspie, who was, we believe, the elder of the two brothers, has been several years dead. He had much practical sagacity, and was fertile in invention. He expended much time and money over patents and processes for the manufacture of several materials in connection with his art—stucco, plaster, artificial stone, asphalt, and other substances. Patrick M'Anaspie a quarter of a century ago and upwards, took a leading part in a movement in favour of Irish industries, and used tongue and pen in the struggle. He, in connection with his brother, endeavoured to promote the establishment of schools of design in this city long years before the subject became popular. A building commenced in the rear of his premises or workshops in

Great Brunswick-street, which was never finished, and which may still be seen, was begun with this object in view.

The M'Anaspies failed, as richer and more influential men have failed in similar projects, and because they failed men called their work a "Folly." Patrick M'Anaspie left Dublin for some years, and established a place of business in Liverpool, where he continued, we believe, till his last illness overtook him. He was brought to Dublin to his brother's home in a paralysed state, where he remained till his death.

Thomas M'Anaspie in the meantime conducted the old-established business in Great Brunswick-street with varying success, but the fates seemed against him of late years. He too dabbled a little too much in politics and public questions for his peace of mind. He, however, during his career carried out several profitable contracts, and at times gave employment to a number of men. He was rather fond of law and rushing into print, and could not escape betimes burning his fingers. Indeed Thomas M'Anaspie, or as he was familiarly called, "Tom," became for some years back a "Dublin Character." He issued many strange announcements in the public press, and was not slow in vindicating his and his brother's claims to be considered "First as artists, second as stucco plasterers, third as general statuists, fourth as asphalt manufacturers, fifth as patentees, sixth as promoters of schools of design in this empire, seventh as authors of a work dedicated to the late Lord Brougham, proposing to raise 85 millions per year on two items, as well as an irresistible army of two millions of well disciplined and fighting men, and that without one farthing of outlay to the State, prevent invasion or civil commotion between capital and labour, and give every man of servitude, skill, and ability the right and full benefit of the trade they or he served their lifetime to, as well as to further prevent jobbery and robbery to be any longer continued between officials and capitalists; and last, not least, to secure the moral worth of all, so as to protect and maintain her precious University, and both law and order; eight, also the cause of doing away with that obnoxious law that disgraced the statute book of this empire—I mean the City Attachment Law, that managed both perjury, bribery, and robbery."

The above was one of Thomas M'Anaspie's public announcements a few years since, and it pretty plainly tells the work in which himself and his brother figured for several years. Thomas M'Anaspie claimed also to be one of the designers of the O'Connell Monument. He certainly sent in a design, but, like others, apart from any merit.

We will not discuss now how far Thomas M'Anaspie realised the term of artist in its general acceptation. He was certainly in his earlier years, like his brother, a practical workman, and artist, too, in stucco and scagliola work, and was a modeller, if not a sculptor or artist in marble. We will add no more, except to say that our old citizen of fifty years' standing died in his 70th year, at his residence, 31 Great Brunswick-street, on November 2nd, and that he is buried in Glasnevin. CE.

The Swiss *Bundesrath* announces that the construction of the St. Gothard Tunnel is proceeding with increasing rapidity, and will probably be completed within three years.



## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

It would be a tiresome detail to give the full particulars of the senseless contests in Dublin between the managers of both theatres to outwit each other by theatrical tricks, as well as to betimes excel each other by novelties and expensive plays. The playgoing public, as a whole, were often amused and delighted, but the managers were not long in finding out that they were playing a ruinous game, and that the patronage they expected was only fitful instead of constant, and, if united, was no more than sufficient for one theatre. One illustration at this point may be quoted from the pages of Hitchcock, as it affords a good picture of the nature of the contests, and how they were carried out:—"But the greatest piece of generalship manifested through the whole of this doubtful contest was respecting the new tragedy of 'The Orphan of China,' written by Arthur Murphy, and at that time exhibiting with uncommon reputation in London. The great fame and popularity of this piece rendered it an object of peculiar attention to both houses in Dublin, but to attain their object they pursued quite different lines of conduct. The play printed, was consequently in the hands of both. Mossop observed a profound silence on the subject, and kept his designs as much secret as possible. The managers of Crow-street, confident of their strength, but rather injudiciously, I think, for several weeks made a great parade of their intentions of producing it with pomp and magnificence equal to that of Drury-lane; informing the public of the extraordinary expense they were at in having all the dresses made in London, from models imported from China, and an entire set of scenes painted for the occasion, in the true Chinese style, by the celebrated Carver, then deservedly in the highest reputation. When the expectations of the town were raised to the utmost, and curiosity strained to the highest point, without the least previous hint dropped, most unexpectedly early on Monday morning, January 5th, 1761, bills were posted up announcing the representation of this much-talked of tragedy that very evening at Smock-alley Theatre—the scenery, dresses, and decorations entirely new, with this popular addition, '*the characters will be all new dressed in the manufactures of this kingdom.*' The truth was, they had bespoke dresses to be made in London on the models of the Drury-lane habits, but had not the least expectation of their arriving in time. As they knew that everything depended upon their producing it before the other house, certain they had not an equal chance on equal terms, the dresses and scenery of Crow-street being so superior, they used every exertion possible. The tragedy was rehearsed three times a-day, and Mr. Tracey, then tailor to the theatre, working day and night on the dresses, they were completed in forty-eight hours. The event proved they acted right. 'The Orphan of China' drew five tolerable houses to Smock-alley before they were able to get it out at Crow-street, and then it did not answer the expense they had been at. The dresses and scenery were truly characteristic, but the curiosity of the public had been in a great measure previously gratified. With respect to scenery, machinery, and decorations, Crow-street certainly was superior. Carver was then one of the first scene painters in Europe, Mr. Messink the first machinist ever known in this kingdom, and Finny, their carpenter, had infinite merit. The greatest advantage the Crow-street managers obtained over their rivals was in their pantomimes, which they exhibited on the most extensive scale, and in which the harlequin of Mr. Woodward was decidedly the greatest on the stage."

There are some who, even at present, notwithstanding the lapse of time, would like to know how the characters were cast, and what performers personated them at Crow-street and Smock-alley. At the former theatre it was arranged thus:—Zampti, Barry; Etan,

Fleetwood; Timurkan, Walker; Hamet, Jefferson; Octar, Knipe; Morat, Morne; Mirvan, Reed; Mandane, Mrs. Fitzhenry. At Smock-alley:—Zampti, Mossop; Etan, Digges; Timurkan, Sowdon; Hamet, Shaw; Octar, Usher; Morat, Heaton; Mirvan, Kniveton; and Mandane, Mrs. Bellamy.

We find both theatres at this time bringing out the "Tempest," and, as a revival, both rivals brought the play out on the same night. Both managers lost by it, but Mossop is stated, in point of performance, to have had the advantage, and, judging from the cast of characters in the play-bill of the period, we are of opinion that Hitchcock is right.

In this same season "Queen Mab" and the "Sorcerer" were brought out at Crow-street at a great expense, and performed for several nights in a style of perfection, it is stated, worthy of any theatre in Europe; but the great cost attending these representations were not returned by the attendance, although they were much admired by the Dublin audience. Expensive pantomimes and similar representations, although they attracted, did not generally return the money expended upon their production in Dublin at the period of which we are writing.

As Mossop could not compete with the pantomimic entertainments exhibited at Crow-street, he, to counteract their popularity in a measure, revived at Smock-alley "Henry VIII.," producing a representation of the coronation. In consequence of George III.'s accession to the throne, which had shortly before taken place, Mossop's revival of the play turned out lucky by being well timed, and it brought him money. He excited public curiosity by a big bill, and drew several full houses, although "the dresses were not very splendid or numerous."

The farce of "High Life Below Stairs" was performed with success at both houses; and during its representation at Smock-alley an actor of the name of Stayley, while acting in one of the characters, interpolated the toast of "His Majesty George II.: God rest his bones." It appears that some of the audience resented Stayley's freedom of speech, and that Mossop reprimanded him for it. It was merely a bit of witicism on the actor's part, and certainly there was nothing disloyal in wishing rest to his late majesty's bones, which perhaps required it, as did other of the Georges that followed him; but the language in the mouth of the actor sounded odd, and was certain at the time to be resented by the Court party in Dublin. This little incident in the theatre afterwards led to much bitter personal feeling. When publicly reprimanded by Mossop, Stayley endeavoured to justify himself, and, failing, finally appealed to the public, but, as it appears, with little success. He seems also to have created some enemies by his writing and mimicry; and, while pitied by some and blamed by more, he suffered severely for his harmless joke, for he lost and never afterwards regained his situation in Dublin.

During the remaining part of the season Murphy's comedy, "The Way to Keep Him," was performed for the first time at Crow-street in 1761, where we are told "Mrs. Abington added much to her reputation by the easy, elegant, finished portrait of the woman of fashion, which she exhibited in the Widow Belmour." At Smock-alley, Mrs. Bellamy played Cleone with some applause. Late in the month of May, Mossop presented Colman's new comedy, the "Jealous Wife," at Smock-alley; and towards the close of the campaign he opened a subscription for five revived plays—"Don Sebastian," "The Ambitious Stepmother," "Timon of Athens," "Tamerlane," and "Richard." The town was previously pretty well tired of the entertainments at both houses, and these plays were but thinly attended. He finished with the last-mentioned play on the 6th of June, 1761, returning thanks to the public "for the great patronage and support he had experienced." To work up the interest at Crow-street, Woodward had in the meantime proceeded to London, returning with Shuter,

the popular comedian. This actor appeared for the first time in Dublin at Crow-street on the 3rd of June, in the "Miser and School Boy," meeting with a good reception. His second appearance on the 8th of June was for his own benefit. Shuter did not remain long in Dublin, but during his visit played with Barry's company at Cork. While here the characters he played were—Lord Chalkstone, and the Old Woman in "Lethe," Master Stephen (twice), with Scrapin. On the 9th of June Crow-street closed with "Every Man in his Humour." After the close of the season at Crow-street, Barry and Woodward passed with their company to Cork.

Before proceeding to give particulars of the preparations made for the opening of the next season at the two Dublin theatres, we will give some account of what took place in the way of theatricals at Cork, where Barry and Woodward built a theatre, which was opened in the summer of 1761. Cork, long previous to the last-named year, was frequently visited by travelling companies, and Dublin managers at the close of the season in the capital often brought their companies, or a portion of them, to Cork and other large cities and towns in the provinces. The theatres in these places for a considerable period were only temporary and hastily-erected structures. In time the strolling and country companies were forced to give way to those brought from the capital. As early as 1736 we find that a new theatre was erected in Cork, at the corner of Prince's-street and George's-street, on the site where the Bush Tavern afterwards stood. Many of our early eighteenth-century actors appeared on the boards of the Cork theatre, including Elrington, Woffington, Sheridan, and others.

Barry and Woodward's design embraced a theatre on a more extensive scale than the above one. They advertised a subscription for raising a fund towards a new theatre, and in a few weeks sufficient money was forthcoming. The old theatre was too small for processions and pantomimes. Ground in George's-street, in the vicinity of the former building, was purchased, which was accounted an improving situation. The model adopted was that of Crow-street, and the dimensions were nearly as large, save that the Cork theatre had only one gallery. Hitchcock describes the inside as "spacious, elegant, and convenient," holding £150 English, at 4s. the boxes, 3s. the pit, and 2s. the gallery. The stage was described as roomy, and nearly as large as Covent Garden was before its alteration. It was capable in every way of allowing Barry's grand tragic processions and Woodward's pantomimes to be exhibited to advantage. The theatre being finished, it was opened, as we have already said, by Barry and Woodward in July, 1761, with a strong company. Added to the charms of novelty, the citizens of Cork were pleased and satisfied by good acting. In a word, the Cork season proved a brilliant and profitable one—so much so, that we are told the company returned to Dublin flushed with success.

Woodward next sails for England without loss of time, and on the day following Mossop arrived with Mrs. Abington, whom he snatched from the enemy. Mrs. Fitzhenry also enlisted under his banner. The companies of both theatres were said at this time to be very nearly equal, but that the advantage was on Mossop's side on the score of talent. Mrs. Dancer was, of course, a power on Barry's side; and the former two ladies, being apprehensive of her influence, "chose the prospect of an undivided empire at the other theatre" [Smock-alley]. Ryder, who had been some time absent, returned to the last-named theatre. Woodward's mission to England was to pick up some actresses to balance the losses sustained by the secession of Mrs. Abington and Mrs. Bellamy.

Smock-alley opened on the 12th October, 1761, with the "Spanish Friar," in which Mr. Baddely, of Drury-lane, made his first appearance in Gomez. The actor was said to have great merit in several characters,

\* See ante.



such as Frenchmen, Jews, and parts of a dry cynical humour. Throughout the season Baddely supported the following characters among others:—Touchstone, Sir Francis Gripe, Frenchman in "Lethé," Dr. Caius, Mr. Heneycombe, &c. A Miss Ambrose made her *début* on the opening night of the season at Smock-alley, in Elvira, but we hear nothing noticeable mentioned of her then or afterwards.

Crow-street opened on the 24th October, 1761, with Barry as Romeo; and it was a command night of the Earl of Halifax. The sanction of Crow-street as the Theatre Royal was, of course, advantageous to Barry. Woodward some time after returned from England with Miss Elliott, a lady then "in great reputation as a fine girl and pleasing actress." On the 11th November she appeared in her favourite character of Maria in "The Citizen," purposely written for her by Murphy to give scope to her abilities. Woodward was young Philpot in the farce, which was several times repeated. Miss Elliott afterwards appeared in a round of characters. Thomas Barry, son of the manager, appeared about this time, being introduced to the public in "Tamerlane," his father playing Bajazet, but his acting was never above mediocrity. Young Barry's second trial was in "Norval." He continued on the stage for several years, but never made much headway in the profession or gave promise of worthily filling the shoes of his father. At Crow-street he certainly did not add much to the strength of the company. Business, or, in other words, receipts at Crow-street not being satisfactory, it was determined as a last resort to bring forward the veteran Macklin, then upwards of sixty years of age. Being one of the first actors in his line, he was sure to prove attractive. His *Miser*, *Shylock*, and *Iago* brought crowded houses, and replenished the exchequer of the managers, and his representations were often repeated. His "Love à la Mode" was brought out in December, and met with a great success, it being performed for sixteen nights that season. In this piece Barry played Sir Callaghan; Woodward, Squire Groom; Messink, Beau Mordecai; and Macklin his inimitable Sir Archy MacSarcasm.

## ADVERSARIA HIBERNICA,

### LITERARY AND TECHNICAL.

MUCH has been written of late years in professional publications on the subject of dry-rot in timber; but the literature of the subject has been accumulating since the close of the last century, and recently it has found a practical and comprehensive embodiment in Mr. T. A. Britton's excellent treatise, "Dry-Rot in Timber." Wood-boring insects of nearly all kinds, out of water and under water, abroad and at home, have been noticed by Mr. Britton; and where he has utilised the information of his predecessors, he honestly acknowledges his authorities.

The ravages of wood-boring insects contribute to decay and dry-rot, as well as sappy and unseasoned timber enclosed in buildings and deprived of ventilation or a current of air. The use of sea sand and rubbish or road-mud mortar, so constantly used by scamping and speculative builders of the present day, also contributes powerfully to dry-rot, bad smells, sickness, and death. The anobium or death-watch—an insect that for centuries has given rise to superstitious fears in Ireland—is a wood-boring insect, though many and different are the accounts we have of it before its identity was fixed by naturalists.

Swift, in his poem on "Wood, an Insect," written in the year 1725, has left us an amusing description bearing upon our subject. In 1723, owing to the deficiency of copper coinage in Ireland, the king granted to one William Wood the patent-right of coining halfpence and farthings to the extent of £108,000, to be current in this kingdom. If the coinage was proper weight and quality, there could be little objection; but the patent

was obtained in a surreptitious manner, and the whole affair was surrounded with illegality and something of a worse character. Owing to the efforts of Swift, by his letters and his pungent poetical satires, the patent was at last surrendered, but not until the enthusiasm of the people of Ireland was aroused, Swift's printer thrown into prison, and the grand jury ignoring the bill. Swift afterwards satirised Wood in several verses; but in the one we are about to quote, in which he compares him to an insect, the worthy dean gives us the first and most interesting illustration we have met with of the habits of the death-watch, and how to deal with the wood-boring insect. As a satire on Wood, the lines are clever, but are still more so in effecting a double purpose. We give the lines as originally published:—

"By long observation I have understood,  
That two little vermin are kin to Will Wood.  
The first is an insect called a wood-louse,  
That folds up itself in itself for a house:  
As round as a ball, without head or tail,  
Enclosed cap-a-pie in a strong coat of mail.  
And thus William Wood to my fancy appears  
In fillets of brass roll'd up to his ears.  
And over these fillets he wisely has thrown,  
To keep out of danger, a doublet of stone.  
The louse of the wood for a medicine is used,  
Or swallow'd alive, or skillfully bru'd;  
And, let but our mother *Hibernia* contrive  
To swallow Will Wood either bru'd or alive,  
She need be no more with jaundice posset,  
Or sick of obstructions, and pains in her chest.  
The next is an insect we call a wood-worm,  
That lies in old Wood like a lair in her form.  
With teeth or with claws it will bite or will scratch,  
And chambermaids christen this worm a death-watch,  
Because, like a watch, it always cries click:  
Then woe be to those in the house who are sick,  
For, sure as a gun, they will give up the ghost.  
If the maggot cries *click* when it scratches the post;  
But a kettle of scalding water injected  
Infinitely cures the timber affected:  
The oven is broken, the danger is over,  
The maggot will die, and the sick will recover!  
Such a worm was Will Wood, when he scratch'd at the door  
Of a governing statesman or favourite squire.  
The death of the nation he seem'd to foretell,  
And the sound of his brass we took for a knell.  
But now since the *Draper* hath heartily maul'd him,  
I think the best thing we can do is to scald him;  
For which operation there's nothing more proper  
Than the liquor he deals in, his own melted copper;  
Unless, like the *Dutch*, you rather would boil  
This coiner of raps in a cauldron of oil.  
Then choose which you please, and let each bring a faggot,  
For our fear's at an end with the death of the maggot."

Swift's stinging satires killed Wood, the coiner, as effectively as the scalding water killed the death-watch. The mention of a "doublet of stone" in the first part of the verses was in allusion to the fact of Wood being at one time in jail for debt.

Pendant to Swift's lines on the wood-boring death-watch, his verses "To Quilca," the country house of Dr. Thomas Sheridan, which was out of repair, will not be out of place:—

"Let me thy properties explain.  
A rotten cabin dripping rain;  
Chimnies with scorn rejecting smoke!  
Stools, tables, chairs, and bedsteads broke.  
Here elements have lost their uses,  
Air ripens not, nor earth produces.  
In vain we make poor Sheelah toil;  
Fire will not roast, nor water boil.  
Through all the valleys, hills, and plains  
The goddess Want in triumph reigns;  
And her chief officers of state,  
Sloth, Dirt, and Theft, around her wait."

There was much truth as well as humorous raillery in the above lines.

With the rise and progress of social and sanitary science during late years, hospitals have increased all over the three kingdoms, for every kind of ill which human nature is heir to, or rather afflicted with. Vast sums are now subscribed for the support of our public hospitals, particularly in the sister kingdom. Hospitals for the cure of preventable diseases ought to be decreasing, through the advance of sanitary science and a knowledge of the laws of health; but hospitals for surgical cases will be always necessary. It is stated the Greeks had no name to express what we understand by the word *hospital*, and we read that at Athens provision was made for the maintenance of those who had been severely wounded in war, as well as for their wives and children, but there was no asylum for even these persons in sickness. It is also remarked that among the Romans we should seek in vain for any establishment intended to alleviate the sufferings of the indigent sick, and two of the most polished

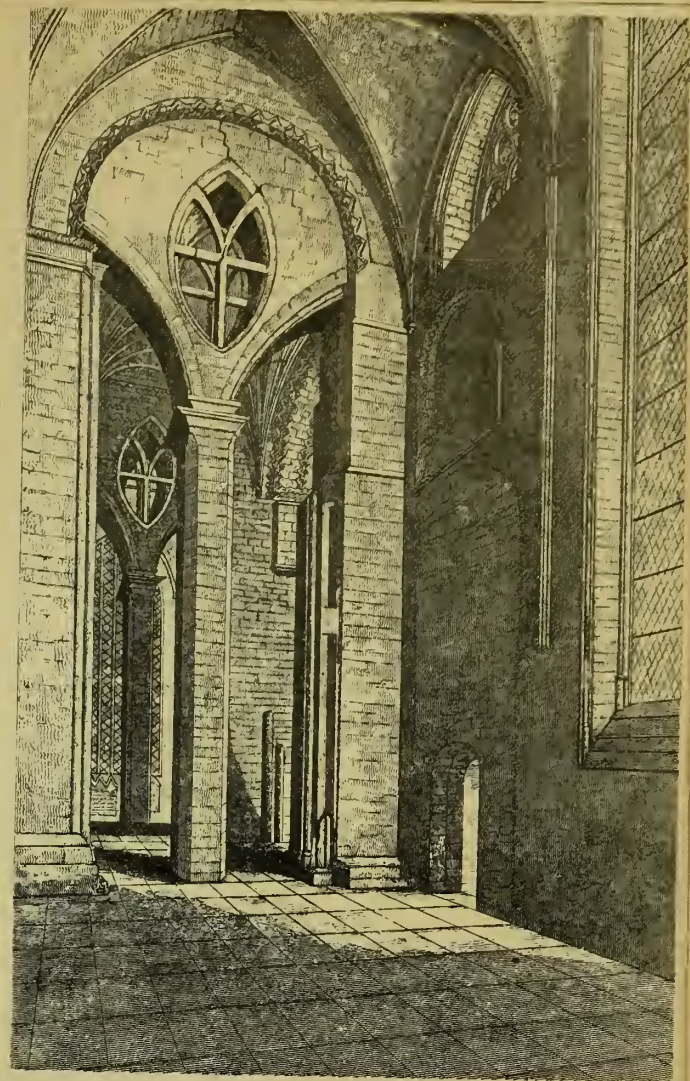
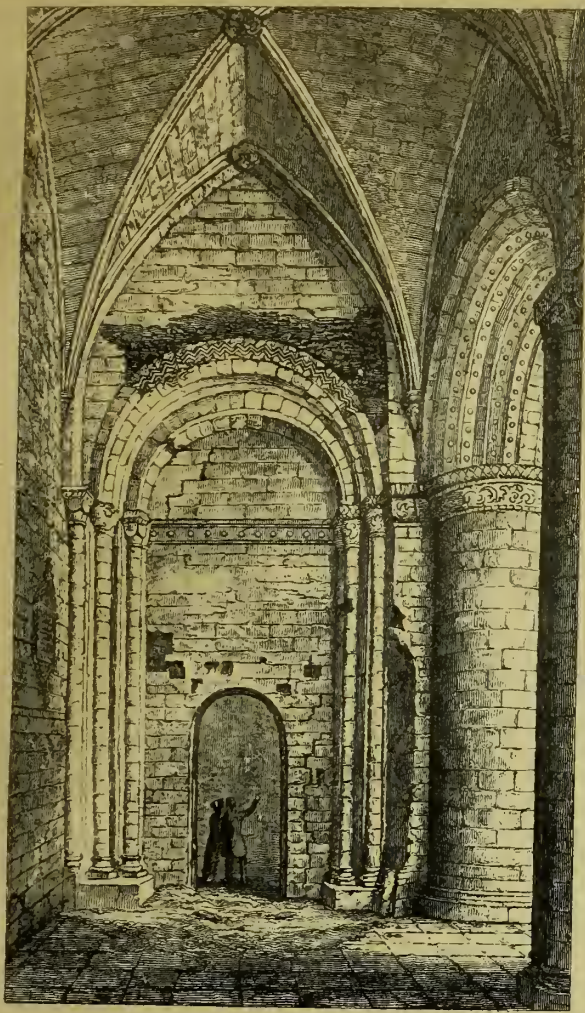
nations of antiquity consecrated no retroats for the unfortunate. What thousands upon thousands of the unfortunate poor or serfs must not have suffered and died through terrible sufferings. A slave, if dangerously ill, was left entirely to the care of his fellows in servitude, and in many instances his master would not be at the expense of burying his corpse, but allowed it to be thrown out to the vultures and wild animals. According to Horace, the Esqueline Mount was whitened with the great number of bones left there in heaps by the vultures, affording proof of what little care was taken of the burial of the poor. These unhappy men or slaves, numerous enough in the best days of Athens or Rome, had no resource in their dire calamity but private charity, and they had to depend otherwise upon the strength of their constitutions or the course of nature.

It would appear that until the establishment of Christianity there are no traces of the founding of any hospitals or asylums for the accommodation of the infirm or unfortunate. In the year 258 a regular provision was made for the poor and sick by alms from the members of the church. About 880 it would seem the first regular hospital was built. The Emperor Julian attributed in a great measure to these charitable institutions the rapid progress of Christianity, and it is said that he had it in view to attempt the re-establishment of Paganism by similar means.

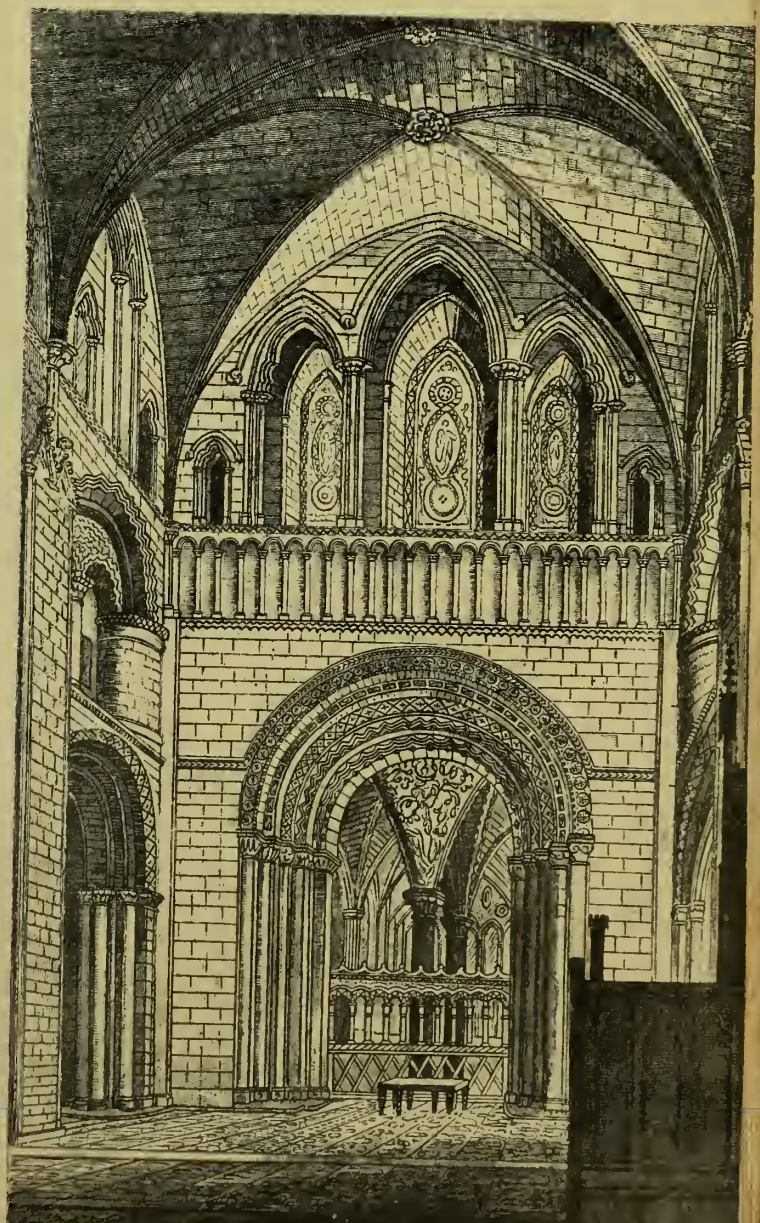
Of modern hospitals and their rise much might be written, and Dublin has no need of feeling ashamed in comparison with other cities, for from the early years of the eighteenth century until the present, many hospitals and asylums have flourished in her midst. Private benevolence and philanthropy of a most noble and self-denying kind have led to the foundation of several of them. Our maternity hospital was the first of its kind in the three kingdoms, and in other respects in the last century Dublin was not behind, but in advance in the founding of hospitals and asylums for the alleviation of human affliction. In our own time, of course, in the extent of these institutions, Dublin cannot compare with the capital of the sister kingdom, and it would be most unfair to draw a comparison between a population counted by thousands only, and one reckoned by millions. At the present day even the victims of a cruel war receive hospital accommodation, and their wounds are attended to on the field of battle; but "a curse upon their perjured arts" that lead to such slaughter and human suffering, that kings may add territory to territory, and laugh at the folly of mankind that enables them to rule by wholesale murder. It is passing strange, indeed, that in an age remarkable for the increasing number of its hospitals and charitable institutions, the science and art of murder was never before so marked and developed. And yet, we claim to be a Christian people—bah! our christianity is little better than a veneer, and the less we say about it the better until we reform our ways, and force our rulers to mend theirs or move out of the way for good.

Leaving out the sparse occurrence of gold and silver as a mining speculation in Ireland, yet it is worth noticing that copper is found in eighteen different counties, lead in the same, iron in nineteen, tin in two, coal in fifteen, marble in nineteen, granite in seven, slate in six, and several other minerals in one or other of the counties of the four provinces of Ireland. If one mineral more than another ought to be worked in Ireland it is coal, for with plenty of coal in the market, and procurable at a cheap rate, other industries would follow. Swift once sarcastically said that we should burn everything that came from England but its coal, for he considered by our burning foreign coal we were only enriching the sister kingdom and empowering ourselves. One fact is clear that we are fastly burning out our peat resources, for our bogs will not supply the wants of inland peasantry for any very long period.





HEREFORD CATHEDRAL. - INTERIOR.





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The amount of coal raised in Ireland at present is not worth speaking of; but of course we are told we are an agricultural country, and not a manufacturing one, and that we ought to be content with finding a market for our live stock over the channel. Now we desire to see our country a manufacturing one, though not entirely so; and until many of our extinct manufactures are again re-established and more new ones added, this country will not be really prosperous. We once had vast forests in this country, and it was for the want of working our coal mines that these were in many cases ruthlessly destroyed. According to Sir William Petty there were 6,600 or perhaps 8,000 forges at work, and these gave employment to nearly 25,000 persons. Timber was destroyed, valuable industries had to depend upon peat or imported coal, and lastly, through the expense, certain industries ceased almost altogether. With the general uprise of Irish coal-mining, many industries would get a new start, employment would be rife, emigration would cease, and thousands more of our artisans and labourers in our cities and towns would find profitable and constant work throughout the year.

H.

## LAW.

## A BUILDING SURVEYOR'S FEES.

COURT OF QUEEN'S BENCH.—Nov. 6.

*McConnell v. Kilgallen.*—This was an action to recover a sum of money for work and labour in supplying to defendant, who is a builder and contractor in Sligo, certain quantities which enabled him to tender for building the new Roman Catholic Church at Castlebar. The plaintiff, Mr. Henry McConnell, is a building surveyor in this city. Defendant pleaded in substance that the quantities were inaccurate and that, therefore, they were useless to him; and further, that under the contract, plaintiff was to be paid out of the first instalment which defendant received on account of the work he did in building the chapel. Defendant's tender was for £8,964—£3,000 below the amount for which other contractors tendered. The building committee accepted his tender, but he declined to proceed with the work, alleging that he would be ruined, and that if he had not been misled by plaintiff's quantities the tender would have been for more than £11,000. At the trial,\* which took place at the last after-sittings before Mr. Justice Barry and a special jury, evidence was produced on the part of plaintiff to show that his quantities were accurate. Defendant had witnesses examined in support of his defences, and the jury found that defendant received no benefit from the quantities, and that plaintiff was only entitled to be paid out of the first instalment. This amounted to a verdict for defendant; but on the application of plaintiff's counsel, leave was granted to add a new count, averring that it was part of the agreement that if defendant's tender for the work were accepted he should proceed with it. The jury found that that was so, and a verdict was then entered up for plaintiff for £132 ls. and costs.

The MacDermott, Q.C., who appeared on the part of defendant, now moved for an order to set aside the verdict. He submitted that the opinion of the jury upon the record, as it stood originally really concluded the case, and that it was an error to allow a new count to be added alleging a totally different cause of action. There was no contract between plaintiff and defendant that the latter, if his tender were accepted, should go on with the work.

Mr. Justice Fitzgerald asked was it not implied?

The MacDermott said that the jury found the plaintiff was to be paid out of the first instalment defendant received for the work, but he received no instalment.

The Lord Chief Justice—But is not that

because of defendant's own default in not going on with the work?

The MacDermott—He would have been ruined if he had gone on, and the jury found that he received no benefit from plaintiff's work.

The Court granted a conditional order.

### THE INSTITUTION OF CIVIL ENGINEERS, LONDON.

THE council of the Institution of Civil Engineers invite communications, of a complete and comprehensive character, on any of the subjects included in list, as well as on other analogous questions. For approved original communications, the council will be prepared to award premiums, arising out of special funds bequeathed for the purpose, the particulars of which are as under:—

The Telford Fund, left "in trust, the interest to be expended in annual premiums, under the direction of the council." This bequest (with accumulations of dividends) now produces about £260 annually.

The Manby Donation, given "to form a fund for an annual premium or premiums for papers read at the meetings," of the value of £10 a-year.

The Miller Fund, bequeathed by the testator "for the purpose of forming a fund for providing premiums or prizes for the students of the said institution, upon the principle of the 'Telford Fund.'" This fund (with accumulations of dividends) now realises nearly £180 per annum. Out of this fund the council have established a scholarship, called "The Miller Scholarship of the Institution of Civil Engineers,"—and are prepared to award one such scholarship, not exceeding £40 in value, each year, and tenable for three years.

The Howard Bequest, directed by the testator to be applied "for the purpose of presenting periodically a prize or medal to the author of a treatise on any of the uses or properties of iron, or to the inventor of some new and valuable process relating thereto, such author or inventor being a member, graduate, or associate of the said institution." The annual income amounts to rather more than £16. It is proposed to award this prize every five years, commencing in 1877.

The council will not, in any case, make an award unless a communication of adequate merit is received; but, on the other hand, more than one premium will be given, if there are several deserving memoirs on the same subject. In the adjudication of the premiums no distinction will be made between essays received from a member, an associate, or a student of the institution (except in the cases of the Miller and the Howard bequests, which are limited by the donors), or from any other person, whether a native or a foreigner.

## COLERAINE WATERWORKS.

AMONGST the business transacted by the Coleraine Town Commissioners at their meeting last week was the consideration of tenders for the construction of the waterworks, viz.:—

Messrs. Bredner and Fleming, Leith	£9,179 11 10
Robert Simpson, Dublin	7,514 0 0
T. S. Hunter, Glasgow	7,510 10 0
Messrs. A. D. Williamson and Co., Coleraine	6,741 1 5
James Bradley, Derry	6,445 0 0
Robert Carlisle, Belfast	6,218 16 0
Messrs. M'Crea and M'Farland, Belfast	5,968 18 1
William Scott, Hamilton	5,691 12 0
Edward M'Neillage, Londonderry	5,480 7 4
Messrs. M'Elroy and Son, Boswell, Scotland	5,079 18 6

It having been suggested that inquiry should be made as to the character and abilities of four of the persons sending in the lowest proposals, it was resolved that the consideration of the tenders for the waterworks be postponed until Thursday, at 12 o'clock, when it was expected Mr. Harte, C.E., would be in attendance.

At the adjourned meeting the chairman read a number of letters and telegrams with testimonials in favour of Mr. E. M'Neillage,

Mr. Scott, and Messrs. M'Crea and M'Farland, the writers speaking highly of each as quite capable of completing the waterworks, if either got the contract. The chairman added that Mr. M'Neillage was lowest, with longest time; Mr. Scott next, with the shortest time; Messrs. M'Crea and M'Farland the highest of the three whose tenders were to be taken into consideration.

Mr. Baxter moved that the tender of Mr. M'Neillage be accepted, and that he get the contract conditionally, provided that he give ample security, on the commissioners obtaining the loan from the Board of Public Works.

The chairman said he believed that would be got within the next fortnight.

Mr. Orr seconded the motion.

Mr. Mains moved as an amendment that Mr. Scott's tender be accepted, as he offered to complete the work within six months, and give the best of all security—cash.

Mr. Anderson said if sureties were proposed, the parties named should be asked by letter whether they were prepared to go into the contract.

Mr. Andrews seconded the amendment.

The chairman took the vote, with the result subjoined:—For the amendment, 4; for the motion, 10.

The chairman declared the motion carried, subject to the amount and character of the security (which might be left to Mr. Harte) being found satisfactory.

## GREEK AND ROMAN ART—

THEIR CONNEXION WITH THE TEACHING OF THE CLASSICS.\*

## LECTURE II.

IN the last lecture I tried to establish the point that the study of ancient art and archæology is, or ought to be, an essential part of classical education properly so called, and that although our own country is proud and justly proud of her classical scholars in philology and other branches of classical scholarship, yet she has not adequately carried on that branch of scholarship which consists in the study, comparison, and explanation of ancient monuments, side by side with that branch which consists of the study and comparison and explanation of ancient texts.

The two important points to which my last lecture was directed were these: first, that the study of the remains of ancient art and archæology, the remains of practical handiwork, gave life to the study of literature, and continually illustrated it and brought home with new force the beautiful stories of the ancient writers; and, secondly, how, independently of literature, and as a separate study it cultivated valuable faculties, and required very careful and exact special qualities of its own. As an example, to illustrate both of these points, we chose two particular works; in literature, a very beautiful fragment of early religious Greek poetry, the Homeric hymn to Dionysius, and, as a work of art, a frieze very familiar to students of these things, the frieze on the Choragic monument of Lysicrates at Athens, which illustrates, in the way which sculpture thought proper to illustrate, the same subject. And we saw how Greek sculpture, like all true art, was not the literal illustration of poetry, but how it took the same theme and worked it out in a way of its own, and according to its own laws.

In pursuance of our subject, I mean to-day to try and bring home to you how the creations of Greek and Roman art are co-extensive with all provinces of the ancient life and mind. There is no phase of existence in Greece, or in the civilisation which Rome borrowed from Greece, which this study does not illustrate and illuminate; nothing which the ancient Greek, or, following him, the ancient Roman, did, or thought, or suffered, or desired, which has not found an embodiment in art—in the practical works of men's hands—as well as in the written records of their literature. That is only another way of saying what we said at starting, viz., that the essential key to the whole of the Greek genius is that which is known by the ugly word anthropomorphism, that spirit which considered all things alike—whether the external aspects of the world, or the forces of destiny, or those of the human spirit—under human lineaments, conceiving of everything that it is possible to conceive of at all in the likeness of a human being. That being the key to and essential character of

\* Reported in our No. for July 15th.

\* Cantor Lecture. By Mr. Sidney Colvin, Slade Professor of Fine Art at Cambridge.



the ancient genius, it naturally follows that those embodiments in the human form were so many conceptions of the mind, standing waiting ready to the hand, to be embodied in art. What we are considering to-day is the range and extent of the conceptions that are thus represented, personified—incarnated one may say, for they became as living, real human beings under the creative touch of ancient art—in sculpture, painting, and their subordinate arts. We are not to-day considering the art which is not imitative, which does not embody conceptions of the mind in definite human shape, and therefore architecture, for the present, we pass over. The study of ancient architecture, and of the way in which the genius of the Greeks showed itself in the proportions and in the plan of their buildings, especially in their temples—for the whole of the Greek architecture was concentrated on the temple—is one of the most interesting studies possible, and one which reveals to us the Greek mind in its most characteristic way, but does not for the present concern us.

Coming, then, to a short survey of the range of these subjects to which the Greek imagination, and, presently, Greek art, gave human lineaments, we shall speak both of those representative works of art which we know to have existed, from the fame they had, from descriptions and accounts handed down to us in books, and also of those, unhappily a much smaller number, which still remain. The greater part of those which we know from books have perished long ago; have been trailed off to Rome in the days of the Roman conquest, and have perished there, or have been rifled where they stood by subsequent barbarians.

Of course, in so vast a range of subjects as this, I cannot attempt to illustrate what I am saying with any completeness; but I have a few diagrams, which I have brought to-day and placed here, to illustrate one or two particular points which will arise in the course of our study. The investigation of these types and creations of ancient art is an investigation of two kinds. First, it inquires what creation—the work of art—represents; and next, how each particular type begins and grows, how it starts up in early times, and how we can follow it in the remains that have come down to us, growing, developing gradually from rude, primitive, archaic forms, down to the times of the highest Greek civilisation, when the embodiment is adequate and perfect; and again, when civilisation passes beyond its highest and begins to descend again, how the work of art also begins to go down, and how the consummate form passes into the over-ripe, and so into degeneracy and deterioration. That historical progress will not at all enter into our to-day's study. Our point is to see how the works of ancient handicraft and things produced in painting, sculpture, and a thousand subordinate ways cover the whole range of the ancient life and the ancient mind.

The embodiments which present themselves first to our consideration are those of the twelve great Olympian gods of Greece, gods whose origin and history it is in many cases hard to disentangle, but who by the time Greece was Greece, and Greek civilisation was at all developed, divided amongst them the whole empire of the world in the Greek imagination. You are aware how in these conceptions physical and moral powers are continually intermixed, how originally the sole idea embodied in any god was the physical idea, and how by degrees moral, intellectual, and political ideas became associated with them. And you remember, no doubt, who the twelve great Olympian gods of Greece were. First, the sovereign father of all, Zeus, the god in whom it is probable that originally the physical sky was personified. He holds in one hand the thunderbolt, the symbol of the sudden, destructive, astonishing, overwhelming powers of the sky, and his familiar attendant is an eagle, the eagle of course being in like manner a symbol of things that swoop down suddenly upon the earth from above. Zeus then, who came in the historic times of Greece to be the central father of all the gods, was originally, we suppose, a personification of certain particular powers of the sky. Next associated with him comes the wife of Zeus, Hera. Hera is the goddess of wedded womanhood, she is the sister and wife of Zeus, the deity who assists women in labour, the goddess of birth, the goddess of things especially belonging to women, and belonging to women especially in the relation of lawful married life.

Then, own brother to Zeus, co-equal with him, but a divinity almost purely physical, is Poseidon, the god of the sea. In him the powers of the ocean are incarnate, and, naturally, being a representation favourable to art, he suggests his own types and his own accompaniments. Then, keeping still in the order of genealogy, we have co-equal in age with these, Demeter. The name of the goddess Demeter, shows that her original signification was purely symbolical. Her name means "mother earth."

But presently there passed into the conception of this goddess all kinds of further moral and intellectual meanings—mother earth becomes the place from which life springs up and into which life goes down, and so Demeter becomes the goddess of the dead, and the goddess of death, in the sense in which the earth is the place into which all things go down and are lost. In this double sense she remains one of the great powers of the Greeks.

Then we come to the younger generation, to the children of Zeus. There is Athene, another goddess of the air, a goddess of light and brightness and of the luminous powers of the air. Into association with these physical properties there presently came ideas of intellectual light, of all human art and ingenuity and invention. The list is familiar to many of you, and there is no time to go through it all, of these twelve sovereign powers who divided between them, for the Greek, the empire of the world. They all, of course, had their temples, more or less famous, and their temple precincts, and each temple and each precinct had its images, and these were found all over Greece, and in every region of Greece.

In the beginning, Greek sculpture was essentially subordinate to Greek religion, and therefore had its home in the Greek temple. Sculpture arose from the desire to adorn, with the best perfection possible, the images of the gods. Presently, it developed itself, from thus first endeavouring to make the image of the god worthy of adoration, into other uses; there came to be three classes of sculpture all concentrated about with the temple. First, there was the god himself, the temple image properly so called. That was originally, in the early times of Greek art, a very rough, rude, wooden image, and retained a peculiar sanctity in connection with its original primitive character. Art was unwilling to change it; and even after the subordinate parts of temple sculpture had acquired something like freedom, the old sacred image remained the old sacred image still—a thing rudely cut out of wood, but decked with rich vestments and draperies. But in the course of time the sanctity especially attaching to these rude wooden, primitive images passed away, and we find, as Greek art comes to maturity, that it produces generally for these central images of the temple things the most beautiful, the most ripe and mature, that it knows how to produce.

Then, besides the central image of the god—the object of worship in the temple—each temple and temple precinct had a vast number of dedicatory statues of its proper god—statues paid for and set up, that is to say, by private or public worshippers. Private persons or states desiring to propitiate the god in honour of some special occasion, would set up a pedestal, either within or without the temple, with a statue of the god under some special attribute, in thanksgiving for some particular protection or in propitiation of some particular evil. Therefore, following those most sacred statues, the special images set up in the temple for worship, you have the other class of statues, the dedicatory statues, set up not specially for worship, but simply in dedication to the gods either for thankoffering or for propitiation.

The third order of sculpture connected with the temple is that which is purely decorative, which springs from the impulse of art and the need of ornament and beauty alone. The principal parts of the temple which were adorned with sculpture for adornment's sake, were the frieze and the pediments. These enrichments were dictated, indeed, so far as concerned their subject, by the religion of the temple, and celebrated this or that deed or manifestation of the temple's god. Let us make a hasty survey of the most famous and important temples of some of the most famous and greatest gods of Greece, and from that we shall get some idea of the abundance and multitudinousness of these temples and their images, and of the sculptures, both the dedicatory and decorative, which enriched them.

To begin with Zeus, the great personification of the sky, the all-father of gods and men. The great central home of the worship of Zeus was in a place which is now very famous in our ears, in the valley of Olympia, in the western part of the Peloponnesus. From various circumstances, this valley of the River Alpheus, in the west of the Peloponnesus, had come to be the common theatre of Greece, the place where all men of Greek blood met once in four years for the great athletic contests, during the progress of which all warfare was suspended, and every Greek was for once the true brother of every other Greek. Zeus as the thunderer, the god of sudden celestial phenomena, of storms, rains, and atmospheric disturbances, was thought to have his particular residence in some mountains that protect this valley on the north. This great scene of athletic sports of all the Greeks, was also the great scene of the worship of Zeus.

The sports were held under this god's especial patronage, and the two aspects of the festival—the religious and the athletic aspect—were inseparable. The great temple of Olympia was long famous, as not only the great centre of the common religious worship of Greece, but as the place most splendidly adorned by the greatest art of Greece. A new temple was raised and new ornaments added to the temple, in the most flourishing period of Grecian history in the 5th century B.C., the age of Pericles at Athens. We know from ancient accounts what the lineaments of the god were like, and what the adornments of the temple were. The image specially set up for worship in the temple was an instance in which all the old traditions—the traditions of rigidity and primitiveness—had been utterly cast aside, in which the greatest genius of the greatest artists in the world had conspired to make the image the most splendid and consummate that could be conceived. This great image of gold and ivory is most minutely described to us by Pausanias, who tells us how it stood in the middle of the shrine, with a figure of victory in one hand, and with an eagle-surmounted sceptre in the other. Then we are given a long account of the various incredible enrichments in mythological subjects, which were wrought, in the same rich materials, upon the arias and the sides of the chair, or throne, upon which the god sat, upon the sandals of his feet, and upon every portion of the sacred image. This central and memorable statue of the Olympian Zeus has utterly and irrevocably perished, and there is no chance that the excavations now going on will bring to light one shred of its gold and ivory. The image, even if it had not been carried away by the depredators, would have been long ago destroyed by neglect and barbarism. These elaborate statues of gold and ivory, put together with infinite art upon a matrix or framework of wood, required constant care; there were officers specially appointed to look after their maintenance. The statue had, in some instances, to be sprinkled with water, and, in some instances, to be oiled, to prevent all this elaborate fabric from springing. Now the only clue we have to the splendour of this Olympian Zeus are a few fragments of Greek art in which the type is repeated. There are certain coins in which we have a sitting figure with the sceptre, with the victory and the eagle, copied from the image of the Olympian Zeus. There are a few heads, like the one known as the Jupiter of Ottricoli. Otherwise, the aspect of this chief work of Phidias is irrevocably lost to us, and we have to content ourselves with the accessory and comparatively unimportant parts of the ornaments of the temple. Besides this great central image of the god, honoured and worshipped at Olympus, a great many other statues of Zeus crowded the sacred grove which surrounded the temple. For one thing, almost every state in Greece, and almost every great private personage, who at one time or another wanted to propitiate the god in some special way, would set up here his own special statue; so that among the two thousand or more statues enumerated in the valley of the Alpheus by Pausanias, perhaps more than half were figures in various semblance of this one god Zeus. Whenever anybody was caught cheating at the Olympic games, whenever anybody violated the rules, he was fined, but the money was spent in the purchase of a statue; so that at the foot of that hill (Kronion), which was the natural grand stand of the Olympic games—and which you can see to this day—where all the people stood, there was a long row of statues of Zeus in bronze, arising entirely from these fines of people who had played false at the games. It is to be feared that immeasurably the majority of the Olympian statues, even of those which were not taken away to Rome in the days of the Roman conquest, have perished. Already the discoveries which have been made there have brought to light the pedestals of many of these statues exactly in the state in which they were when Pausanias saw them, but the statues themselves have disappeared. All the things which have in any abundance been discovered belong to the other, the third order of decorative sculpture, which I have spoken of, that which has its origin in the desire of enriching and adorning the temple. From their situation these sculptures of frieze and pediment were not exposed to robbery at the time, and have only come within reach since the destruction and downfall of the temple itself. It is quite certain, I think, that the most precious remains that will yet be found of Greek art will be—what the most precious remains that have hitherto been found are—remains of the same kind, remains, that is to say, not of the great central works of art, not of the images which stood in the temples, not even any great number of the dedicatory statues which stood round about the temples, but of friezes, of metopes, of groups set up in the pediments, which have lain buried, since the temple fell, in the soil



where modern discovery has found them. We know very well what the subjects of the pediment sculptures, at the Olympian temple of Zeus, were. On the one side there was represented a race between Hippodamia, the daughter of the legendary king of the soil, and the invader Pelops. One pediment represented this race, and between the two groups there stood the figure of Zeus, the only Zeus we have yet recovered from this famous temple, a mutilated figure, not nearly so well carved as we had hoped. On the other side there was another famous scheme of sculpture, showing a very familiar subject, the fight between the Centaurs and the Lapithæ, when the Centaurs rushed on the women of the Lapithæ, at the marriage feast. A vast amount has been recovered from this pediment, including fragments of both the Centaurs and the women, amongst them ten heads, more or less complete. That is a single typical example of the proportion of what we can, at best, hope to recover of ancient art compared to what was there in the days of its glory.

Passing to the other gods and goddesses of the great Olympian group, there are some more celebrated in temples, and some less. There are only two or three of these gods who were especially associated with festivals and with forms of worship in which the whole of Greece participated on certain anniversaries. The Olympian festival, we have seen, was the festival of all others in which all the Greeks participated. Then the goddess of whom I have spoken, Demeter, the earth mother, had associated with her special rites in which also all the Greeks took part. This second Panhellenic festival was the festival of Demeter at Eleusis. Consequently, that great Eleusinian temple is renowned in all antiquity. What at present remains of it is, first, a few drums and capitals of columns, not belonging really to the great dome of the temple, but probably to later additions; over the whole site on which stood the body of the temple stands now a modern Greek village, Lepsina. Fifty years ago, an Englishman thought he had found the famous central statue of the goddess at Eleusis. There was a great colossal figure, very much shattered, only a fragment of it above the soil, which this Englishman dug away with great labour and brought to England, and it now stands at Cambridge. But, such is the vanity of all hopes in these things, unless one goes into the study with the very fullest determination not to see in anything more than is really in it—such is the vanity of too sanguine anticipation in these things, that this reputed statue of the great goddess at Eleusis, which would have been one of the most sacred and memorable remains of Greek art possible to conceive, turns out to be no more than a mere architectural decoration, one of some great row of figures like Caryatides, a figure carrying a great basket on its head, and supporting, probably, the architrave of the building. Of that great temple, then, and that great goddess there remains, for the present, at least, until the village is removed and the soil uncovered, almost nothing. We have to seek for the remains which we do possess at other and less memorable sites. One of the most interesting of recent explorations was made on the site of the ancient Cnidus, on the coast of Asia Minor. There was found a kind of private chapel dedicated to these infernal deities—to those earth gods—Demeter and her daughter. This chapel was at the foot of a precipice which runs along just outside the old town of Cnidus, and straight up the precipice there were several niches cut in the rock, and the figure which had stood in one has been recovered, and you may see it now in the British Museum. We must esteem ourselves very lucky indeed when we can recover a type so near as that to the type of what actually proceeded from the Greek hands, of one of the Greek gods, although it is not one that is found at any famous and memorable shrine. There is another goddess (since we can by no means go through them all), whose name will long ago have occurred to you as one of the most celebrated of all, whose type is best known, and whose temples are most familiar, that is the goddess Athene, the especially Athenian goddess of wisdom, of light (physical and intellectual), of all kinds of clearness and wisdom. Where are we to go for the great central temple of the great goddess Athene? Of course, to Athens—to the Athenian Acropolis, and to the Parthenon, its chief temple. What remains of those images of the goddess Athene, which stood upon the Acropolis—either the great out-door image of Athene, the Clampon, whose lance and helmet shone for miles over the Ægean as the mariner approached the city, or the gold and ivory image of Athene Parthenos, the virgin that presided within the temple named after it, the Parthenon? All that we have recovered or really know of that Athene of the Parthenon is almost immeasurably little. There is a little figure rudely carved in marble which corresponds to the

description we have of her in the attitude and in the position of the shield. There are a few other fragments, and especially coins, upon which we can trace the type of what once this deity was. As to the decorative sculptures of that temple, you knew how they were, at the beginning of this century, brought away from Athens by Lord Elgin, and constitute the greatest treasure for all who wish to study Greek art, those Elgin marbles now in the British Museum. As you go along the great Elgin room, on the right hand side you will find a number of fragments which I dare say, at first sight, look very little indeed. Opposite where the so-called figures of the Fates are placed, there is a fragment of the body of a woman, just one-half of the chest with the two cross straps of the ægis. That is all that remains even of the subordinate ornamental figure of the goddess from the pediment of the Parthenon. That fragment is, for those who care for these things, one of the most sacred and memorable in the world. The remainder of the group from which it comes represents the contest which ended in giving Athene her patronage over the soil of Athens, the legendary contest between Athene and the sea-god Poseidon.

(To be continued.)

### THE ROYAL IRISH ACADEMY.

ON Monday evening the first general meeting of the Academy, for session 1877-8, was held at 19 Dawson-street.

Sir ROBERT KANE in the Chair.

The opening paper was by Mr. Thomas Bayley—"On the Colour, relations and Colorimetric estimation of Nickel and Cobalt." The paper dealt with the mutual reactions of the colours, as exhibited in the spectroscope, of solutions of those two metals upon each other, and their quantitative estimation, deduced by Mr. Bayley from these reactions. The process is rapid, but extremely close and accurate in the results.

The president remarked that Mr. Bayley's paper led to an inviting field in chemical analysis, not merely to detect by the spectro-scope the presence of certain metals in a given substance, but to determine their several amounts, and that in this way the contribution might be regarded as one of the first and most successful determinations of the kind.

The other papers read were:—By Rev. James Pearson, M.A.—"On a Comparison of the observed and calculated heights of High-water at Fleetwood, from the 8th August, 1876, to 9th October, 1877." By E. C. Rotheram, Esq.—"On Sculptured Fragments of Bone from the tumuli at Slieve-na-Calliagh." By Dr. Brünnow—"On Observations on the Parallax of the Planetary Nebulæ, H. iv. 37."

Lord Talbot de Malahide presented a work, written by a Portuguese gentleman, on the Roman bronze tablet, the first found in Portugal.

The Academy adjourned until 30th inst.

### MR. GLADSTONE'S VISITS TO PUBLIC WORKS AND BUILDINGS.

AMONGST other calls, Mr. Gladstone visited on the 6th inst. the harbour and works. Accompanied by Mrs. and Miss Gladstone, Lord and Lady Meath, Lord Brabazon and Lady Kathleen Brabazon, Mr. Murland, Mr. Kinahan, and other members of the Port and Docks Board, together with Mr. Proud, the party proceeded to the North Wall, and witnessed the raising of one of the huge concrete blocks prepared for forming the North Wall Quay extension. Mr. B. B. Stoney, the engineer, explained the process adopted in building the new quay, and the right hon. gentlemen expressed himself highly pleased at the novelty of the construction, especially when informed that an engine of but 16-h.p. was all that was used in putting the machinery in motion to raise the blocks, which are upwards of 350 tons in weight. After leaving the North Wall, Mr. Gladstone returned through the Graving Dock and the Custom House Docks, and proceeded along the quays

to St. Michan's Church, where he was conducted through the vaults, remarkable for their antiseptic qualities. Accompanied by Lord Monck, he next visited the Four Courts, and remained for some time in the Court of Common Pleas, taking a seat on the bench. Having expressed a wish to visit the Castle of Dublin, the right hon. gentleman was escorted to the Record Tower, and commenced an examination of the heraldic and historical documents therein contained. He was very much interested in ascending the winding stone staircase of a portion of the old feudal Castle of Dublin, erected in the time of King John, and was equally gratified by the inspection of its various documents, which he examined in one of the rooms of the tower, in which are preserved the records of the Cromwellian period in Ireland. Here he was met by the historian of these documents, Mr. Prendergast, the author of "The Cromwellian Settlement in Ireland." Mr. Gladstone engaged in conversation with Mr. Prendergast and Sir Bernard Burke, and, accompanied by Lord Monck, was next taken by Sir Bernard Burke through the Chapel Royal and the State apartments of the Castle.

### THE NEW R. C. CHURCH OF AGHABOE.

THE new Church of St. Canice, Aghaboe, of which Mr. G. C. Ashlin is the architect, was dedicated on Sunday, the 4th inst. It stands upon an elevated plateau, commanding an extensive view of the broad and fertile plains of Ossory, stretching from the Slieve-bloom Mountains on the north to the hills of Cullohill on the south, and from the Ballinakill range on the east to the Rock of Cashel on the far west. It is a Gothic edifice, consisting of nave, aisles, and chancel, 108 ft. long and 46 ft. wide. It is built of hammered limestone, with string-courses and ornamental facings of white granite in doorways, windows, and mullions. The clerestory windows are unique in form, and composed of white granite. The tower at the south-western angle is finished, and needs only the spire to complete the external design of the architect. Within the church is complete, wanting nothing but the side altars and Stations of the Cross. The aisles are separated from the nave by a line of Gothic arches, supported by monolithic pillars of polished black marble, resting on granite bases, with exquisitely carved capitals of the same material. The floors of nave and aisles are boarded, and the latter wainscotted. In recesses of the walls of the aisles, which project externally, are placed the confessionals. The floor of the sanctuary is of tessellated tiling in mosaic, and the sanctuary itself is separated from the nave by carved rails of Riga black oak. The high altar, elaborately carved, is of the same material. Both, as well as the altar plate and rich vestments, are the gifts of Lord Castletown, who, moreover, contributed a princely donation as well as "God's acre," the site upon which the church stands. Then there is surmounting the altar a rich chancel window, presented by Mrs. Phelan, of San Francisco, a native of the parish, in which the history of the Passion is written with a pencil of light. At the opposite end, over the vestibule, is placed the organ gallery, sustained by variegated Cork marble pillars.

SANITARY DOINGS IN CAVAN.—At a meeting of the Cavan Union Board there were four tenders for sinking a well and erecting a pump in Arva—one at £76 7s. 6d., one at £65, one at £49 7s. 6d., and £45 6s. The lowest tender Mr. Terence Brady's was accepted. There was only one tender for the purchase of the old metal of Ballyhaise pump, Mr. Howe at £2 10s. which was accepted. A report from two inhabitants of Belturbet complaining of the danger to life and property likely to occur from the reckless manner in which a sewer is being constructed was referred to Dr. Thompson, sanitary officer, to inspect and report thereon.



## BOOKS RECEIVED.

*Transactions of the Institution of Civil Engineers of Ireland.* 40th and 41st Sessions. Dublin: John Falconer, Upper Sackville-street.

THE volume before us contains eleven papers read before the institution. The subjects comprise "Peat," "Waterworks," "Railways," "Concrete," "Bridges," "Sluices," &c., and of each of these we printed a summary soon after its delivery. We should not omit to draw particular attention to the valuable address of the late president of the institution (Mr. Alexander McDonnell), which occupies a large portion of the volume. In it he gives a sketch of every topic that belongs properly to Engineering. As to our city, he thinks well to remind us that "The drainage of Dublin is in the same unsatisfactory state that it has been for years, and, to all appearance, it is likely many more years will pass before anything is done. It must be admitted that the state of Dublin, both as to drainage and the state of its streets, is not a credit to the country." To the volume are appended twenty fold-in lithographs, which have been executed by Messrs. Forster, of Crow-street. The entire workmanship of the book is very creditable to the Dublin Press.

*The Science and Art of the Manufacture of Portland Cement. With Observations on some of its Constructive Applications.* By Henry Reid, C.E. London: E. and F. N. Spon, Charing Cross; and New York. Pp. 450.

THE author of the work before us is already well known in the engineering world by his valuable treatises on Portland Cement and Concrete Making. It is dedicated "to the memory of John Smeaton, the famous constructor of the Eddystone Lighthouse," a man of whose personal history little is known. The following historical facts are given by the author at p. 23:—

"Ancient and extinct civilisations had successfully used cement and mortars, as the existing remains of their engineering and architectural works fully testify. These remains of a varied and interesting character even now show us how much of their stability and permanence is due to the quality of the cementing agent by which the building materials were put together. Much admiration has been expressed on the character and quality of ancient structures, and puzzling guesses as to the mode and manner of the preparation of the mortars. Lime mortar as a binding material was used by the Phœnicians in the island of Cyprus, as shown by the temple ruins of Larnaca. The Egyptians in the Nile Valley are supposed to have made use of the river mud and burnt gypsum as a mortar in building the Pyramids. The Assyrians had recourse to asphalt as their cementing agent in the construction of Babylon and Nineveh. The asphalt of the Dead Sea was well known to the ancients. It was also obtained in pits and springs near the rivers Euphrates and Tigris. Even with such ancient testimony it is difficult to say when and where the first mortars were used. The term or name "mortar" is of Roman derivation, from the fact of these thoroughly practical people using a "mortarium" to secure the perfect homogeneity of the binding material. The name therefore should now be regarded in a generic sense, and alike applicable to all preparations used in binding together in structural form stones, bricks, or other building materials."

And again, at page 25, the author states what Portland cement really is:—

"Portland cement is a chemical product obtained by a preliminary mechanical combination of carbonate of lime with silica and alumina, which, after passing through the succeeding chemical stage of manufacture may be described as a double silicate of lime and alumina. The name given to it by Aspdin has tended to some confusion of ideas about its source and origin, many supposing it was the product of converted oolitic limestone from the island of Portland, in Dorsetshire. A close resemblance, when of an unexceptional quality, in colour and texture to the celebrated Portland building stone favours this belief. This cement is simply an improved hydraulic lime. The term hydraulic is borrowed from the French engineers, who used it to distinguish the limes capable of setting under water

from the common limes devoid of that property. It is synonymous with the term "water," which English engineers formerly applied to all limes used in the construction of sub-aqueous masonry. This distinctive term "hydraulic" is now generally given by European engineers to all cements or limes possessed of that property, whether artificial or natural.

Vicat was the first, probably taking the idea from Smeaton, to experiment on the possibility of rendering the rich (common) limes hydraulic by mixing with them (both in their carbonated and hydrate state) various proportions of different kinds of clays. When these experiments (probably the earliest reliable ones that were guided by chemical reasoning) were first initiated, considerable doubt existed as to the true source from which the faculty of hydraulicity was derived; some authorities maintaining that this valuable property was due to the oxide of manganese, and others attributing this effect to the existence of the oxide of iron. After a great deal of controversy, however, it is now finally conceded that silica and alumina, but especially silica, imparts to rich limes the desired quality of hydraulicity; the presence of the oxides of iron or manganese within certain limits being purely negative in character, so that in its simple and clearly defined position of an improved artificial cement the merits of this material should be easily understood.

There is still a good deal of mystery imported into its manufacture, damaging to those who persist in its continuance. The author, while paying a recent visit to the parent or original manufactory at Wakefield, experienced the still existing tendency to enshroud the process of manufacture with an air of ignorant exclusiveness.

The most valuable property perhaps which a pure Portland cement possesses is that in being invariably uniform in quality. Such a result is, however, only attainable under accurate manipulation in every stage of its manufacture. It is this particular property, more than any other, which has tended most to its advancement, and which causes it to be especially acceptable to engineers for large and important works of all kinds, both on land and in water. This gratifying position could not have been reached if engineers had neglected their duty of rigidly testing the cement before it was used. Manufacturers now understand the requirements of engineers, and act wisely in meeting them in such a way as to increase the good reputation of their manufactures."

With one extract more we must conclude our notice of this very exhaustive work on Cement:—

"The numerous examples of concrete work in the United Kingdom afford ample opportunity of studying the subject in its most comprehensive as well as minutest details. Although the river Liffey works are not the earliest important application of concrete blocks, they certainly to the present continue the boldest and most daring in their conception and execution. The embankment and walling of a tidal river, busy, if not crowded with steam and sailing vessels, in such a manner as that executed under the direction of Mr. Stoney is highly creditable to the scientific and practical ability of that engineer. In the direction of river improvement, concrete blocks after this remarkable example are capable of the most facile execution. The harbour works at Douglas, in the Isle of Man, afford a good example of concrete work, built under the direction of Sir John Coode, who has perhaps the largest experience in such works amongst English engineers. Built in a highly exposed situation, these works withstand the severest gales, and, with but slight exception, without injury or displacement of the blocks. As an evidence of what example induces, it may be stated that previous to the commencement of these and similar works in the Isle of Man, Portland cement or its properties were scarcely known. At present a large consumption of the article has arisen in the execution of other works of a less important but useful kind.

The extensive Government works at Dover harbour have been for many years constructed of concrete blocks. It is now a question whether engineers should not direct their attention to the necessity of increasing the size of the blocks to be used in more than ordinarily exposed situations. During the violent storms of the past winter, several weak points in the existing system of building dock and harbour walls have been developed. There is practically little difficulty in at least doubling the present size of such blocks, and in some situations they might be made equal to those used in the works of the River Liffey. When favourable materials exist—and in most harbour works the obtaining of suitable aggregates is a matter of little difficulty—the size of the blocks need only be limited by the mechanical means accessible for their economical handling and deposition. The

building up of such blocks is not necessarily done by expensive or skilled labour, at least where intelligent supervision exists, and no work of this kind should be undertaken in its absence. Not only should the director of harbour or dock works have a thoroughly practical knowledge of construction, but it is now required that in addition he should possess such technical acquirements as will enable him to estimate the mineralogical value of the stones he is to use, as well as a capacity to challenge a faulty cement. Guarded by these necessary qualifications, he would be the more confidently prepared to encounter the difficulties of his position, and be less fearful (because of his knowledge) to diverge from the beaten path of routine and dogmatism. How many of the failures in constructive operations are due to ignorance and prejudice. Many an old and valued clerk of works of bygone days had seldom more than one idea. If originally a carpenter or joiner, everything he did or thought had a strong dash of timber about it; or if originally a mason or bricklayer, believed only in bricks and stones. Limes and cements, except their various superficial characteristics, were Greek to him, and if they set quick and made a fuss in doing so, he was satisfied. All these ancient peculiarities have now disappeared, and there are clerks of the works who really do believe that slow-setting cement is best, and when it is placed in their hands to use, thoroughly appreciate its most valuable properties."

Including portraits of the author and of John Smeaton, we have sixty-six illustrations. The woodcut on page 353 represents the condition of a group of concrete cottages which, owing to the wretched cement supplied to the builder, tumbled to pieces suddenly and without warning of any kind! It appears that the builder had considerable experience in concrete work. He had purchased the cement direct from the manufacturer, and the labour of building was carefully performed by competent workmen. The accident occurred after the men had left off, and so no loss of life took place. An examination of the cement showed at once where the fault lay, and the manufacturer was compelled to compensate the builder.

We are glad to learn that Mr. Reid intends to pursue the subject further by bringing out a work specially devoted to the consideration of concrete construction in all its varied and interesting developments.

From Messrs. Rivington, London, Oxford, and Cambridge, we are in receipt of "Notes on Building Construction, arranged to meet the requirements of the Syllabus of the Science and Art Department of the Committee of Council on Education, South Kensington." Parts I. and II. A third part is in the press, and will be shortly issued.

#### LIVERPOOL ENGINEERING SOCIETY.

THIS society held its usual fortnightly meeting on the 7th inst., in the rooms of the Royal Institution, Colquitt-street, Mr. H. O. Baldry, A.I.C.E., vice-president, in the chair. Mr. John S. Brodie read a paper on "The Application of Blast Furnace Slag to the purpose of Road-making." Mr. Brodie explained that when soft stone is used for "bottoming," it gradually works through the harder surface, and has to bear the traffic in its place, for which purpose it was never intended. Consequently the road is rendered uneven, and requires much mending. It was claimed for good blast furnace slag that when the bottoming and surface layers are both formed with it, the result is a durable roadway of uniform hardness throughout, and could be obtained at a less cost than the ordinary Macadam system. The mode of preparing the foundations for a road, and the subsequent formation of the successive layers of slag, was next alluded to, details of curvature and other matters being illustrated by drawings. It was shown that no foreign matter should be allowed among the slag, as it would diminish the durability of the roadway. The best slag for road-making was stated to be that produced in smelting the Cleveland ore into grey or foundry iron. Prices of forming slag roads were also given.



## BUILDING SOCIETIES.\*

We print below the first portion of a very instructive and sensible essay on the organisation and working of Building Societies. We hope it will prove useful to members of such societies in Dublin and elsewhere through the provinces, as also to those intending to establish or join these bodies. From the essay that follows, working men, for whom these societies were first established, will learn what to do and avoid, and we hope they will profit by the advice given:—

That Building Societies are amongst the most important financial institutions of the day is beyond doubt, and that they have enabled some portion of the industrial and thrifty classes to become owners of their own houses is a fact; but that they have not done and are not doing so, to the extent that is desirable or was contemplated when originally commenced, must also be admitted.

They have, as all know who have had experience in their conduct, become largely the resort of the speculator who has brought to them business of a very risky and hazardous nature; and the acquisition of property, through their instrumentality, by the class they were originally intended to assist, has in consequence been rendered increasingly difficult. Some have, it is true, succeeded in surmounting the difficulties, but scores have, after struggling for a time to maintain the required payments, been compelled to abandon the effort, and in doing so have found themselves considerable losers. To these persons the pretended "principle" of paying off any considerable portion of the amount advanced has proved a disastrous illusion.

We are of opinion that the fundamental principles of Building Societies, in regard to their fair and equitable administration, and as affecting the relative interests of both classes of members, investors and borrowers, have not received that careful study and thorough investigation which the importance of their character requires and the magnitude of their operations demands.

It is the too common practice, when establishing a society, to adopt the rules of some other society which has the reputation of having worked well, such reputation resting mainly upon the large and remunerative profit which it has paid to the investors, the promoters never troubling themselves to ascertain whether such large profits—having due regard to the individual well-being of all the members—have been honestly earned, or whether the rules they were adopting were just and equitable in their operations towards all concerned. Hence we find handed down from society to society, in an almost stereotyped form, rules which, in our opinion, contain many objectionable clauses operating unfairly upon many of the members. We have no doubt that many of the clauses fraught with these injustices would have been gladly remedied if the promoters of Building Societies had possessed that knowledge of the scientific calculations involved in their operations, which is essentially necessary to enable them successfully to grapple with and remedy those injustices. The various slight modifications which have been made in some of the rules felt to be oppressive and unjust, is evidence that there has been, to some extent, a sincere desire to mitigate their injurious effects; but for want of the necessary knowledge promoters have been unable to do this to the extent desirable, being, perhaps, afraid to do what might appear to them right, less they might get involved in other difficulties. It is the perpetuation of these injustices, to some of which we shall hereafter refer, which has, no doubt, produced amongst the intelligent and thoughtful part of the community a wide-

spread and hostile prejudice against Building Societies generally.

We believe, when constituted on just and equitable principles, having for their motto "Equity to All," there is no class of institutions possessing such a potency for good, or capable of conferring such wide-spread and invaluable benefits upon all classes as Building Societies.

If this is so, it becomes a very important question—"When is a society justly and equitably constituted?" Our reply is, When it is based upon the principle of mutual co-operation for mutual benefit, and when its leading features are, as they ought to be:—

1. To obtain for the small investor as high a rate of interest for his money as the capitalist can get when investing on good mortgage security, which is as much as any reasonable investor has a right to expect. Now it is well known that large sums of money can only be put out at  $3\frac{1}{4}$  or 4 per cent., and that the highest rate realised on private mortgages where the security is ample is 5 per cent., and these rates are often subject to some reduction for expense of collection or Income Tax. It is also known, that but for Building Societies the small investor must, if he wishes safely to invest his money, have recourse to the Post-office or other sound savings bank institution, where he would only get  $2\frac{1}{2}$  or 3 per cent. Therefore, if the investor gets 5 per cent. in a building society, he is benefited to the extent of from 2 to  $2\frac{1}{2}$  per cent., and is thereby placed in as advantageous a position as the large capitalist.

2. To offer the borrower money at the same rate of interest at which it can be obtained on a private mortgage. Thus, the highest rate chargeable by a society should be 5 per cent., and as the society advances for a fixed term, repayable by small instalments, such fixity of term and the privilege of paying off his mortgage by small amounts, at a low rate of interest, are the sole benefits which the borrower derives from the society.

3. For these advantages each member, whether investor or borrower, must pay his fair quota of expenses incurred in obtaining them.

Only a society based upon these three leading features can be called a mutual society. Now, how many societies calling themselves mutual societies are so constituted? Of late years it has become the practice to allow borrowing members along with the investors to participate in what they call profit, and those adopting this course have styled themselves "mutual societies." What a misnomer this is we will endeavour to show.

Such societies generally guarantee to the investor a minimum rate of 5 per cent., at the same time charging to borrowers  $7\frac{1}{2}$  to 8 per cent., and very frequently much more. Out of the margin of interest existing between what is so guaranteed to the investor and paid by the borrower, all the expenses and losses of the society have to be paid, except such small portions as may be incidentally derived from entrance fees, fines, &c., and any profit realised on deposits. Then if, after the expenses and losses have thus been provided for, there is any surplus, such surplus is considered profit, and is apportioned as bonus between the investors and borrowers. It will, however, be seen at once that the sum so credited to an investor as bonus, whilst it is to him actual net profit, being an augmentation of his interest without any corresponding payment, is to the borrower only a return of a portion of the interest he has already paid; and that he has actually paid, if not all, certainly by far the major part of the expenses and losses of the society, whilst the investors have contributed little or nothing thereto.

We take it as evidence of the amount of public interest that is now being felt in the present constitution of Building Societies, and the advisability of adopting principles such as we have indicated, that the question has been brought before one of the largest and perhaps the most popular building

society in the metropolis—"The London Temperance Building Society." . . . .

It is a fact well known to those who take an interest in Building Societies, that the "Temperance" has long been closed to investors on account of not being able to find sufficient borrowers to take all the money offered to them. This, as has been very forcibly pointed out, was because of the high rate of interest the borrowers are required to pay. The rate of interest in the society alluded to, when such interest is charged upon the balance of capital due after each monthly payment, varies according to the premium charged, being for 12 years, when 6s. per annum per share of £30 is charged £7 13s. 2d., and for 15 years, when the same premium is charged, close upon £7 15s. per cent. per annum. Now these rates, although not so high as in some other societies, are sufficiently high, as is shown by the society's own experience, to exclude prudent men with good securities from availing themselves of the advance department, and therefore they borrow on a private mortgage what they would otherwise prefer borrowing from a Building Society, and invest the instalment, which would be required to pay off their loan, less the interest paid to the private mortgagee, in a society, and find themselves thereby considerable gainers.

Take the following example: Suppose a person borrows £100 of the "Temperance" for a term of 15 years, with a premium of 5s. per share per annum, he would have to pay 180 monthly (15 years) instalments, at 18s. 1d. per month, which would amount to £10 17s. per annum, and in 15 years the loan would be paid off, and he would have his property handed over to him discharged from the mortgage. If, however, he borrowed the money on a private mortgage, at 5 per cent., he would have £5 per annum to pay for interest, and if he invested the difference between that sum and £10 17s., the yearly amount of the monthly instalment which he would have had to pay had he borrowed from the society, viz., £5 17s., or 9s. 9d. per month, in a society paying the nominal rate of 5 per cent. interest compounded monthly, he would find at the end of  $12\frac{1}{2}$  years the £5 17s. so invested would realise £101 14s. 4d. This would be sufficient to pay off his private mortgage of £100, and leave him a surplus of £1 14s. 4d.; in addition to which he would be in possession of his property discharged from the mortgage at the end of  $12\frac{1}{2}$  years, instead of having to wait 15 years, and would also save  $2\frac{1}{2}$  years' subscription at £10 17s. per annum, amounting to £27 2s. 6d., making a total saving in money outlay at the end of 12½ years of £28 16s. 10d., but if he pays the monthly instalments to the end of 15 years they will accumulate to £130 16s. 10d., thus showing the result of a true comparison to be a saving of £30 16s. 10d. per cent.

We submit that a society ought to be so constituted that it shall always be found to be more advantageous for a borrower to obtain money of a building society than of a private individual, and this would always be so, provided the rate of interest was no more than is charged in the latter case. We were intimately acquainted with the originators and promoters of the Leeds society referred to in the report of the Royal Commission, having been connected with it when it was commenced in 1848, and having watched its progress ever since. A little of its history as bearing upon the question under discussion may be both interesting and instructive.

The society was the outcome of the conscientious scruples of its solicitor, who, being deeply impressed with the inequitable character of Building Societies as generally constituted, conferred with several gentlemen as to the formation of an equitable society; and the one referred to was then commenced, based substantially upon the principles we have set forth. The rate of interest fixed upon was 5 per cent. per annum to both investors and borrowers; each were to contribute alike to the working expenses; and as it was thought a weekly payment would secure a larger number of members, and

\* From "Building Societies: not as they are, but as they should be." By Samuel E. Platt. London: Allen, Aylesbury, Poulton.



open up the advantages of the society to the humblest class, such payment was adopted. Mr. Theodore Jones was applied to, and instructed to prepare tables to carry out the views of the promoters, but in doing so he erroneously inserted interest for a calendar instead of a lunar month. This error, which of course increased the rate of interest, and made the repayments oppressive, was not discovered for some time. The result was, after the society had been established a few years, it was found the high rate of interest caused many redemptions, and prevented the society from finding suitable and safe investments for its funds. It was therefore determined to reduce the interest to 4½ per cent., at the same time extending the term of years, which gave to the borrower a larger advance for a smaller repayment. This gave the society the required relief, and since then they have had no difficulty in finding good securities, having advanced

during the 7 years ending 1855	£210,357	15	0
" 7 " 1862	357,632	16	9
" 7 " 1869	589,666	0	6
" 7 " 1876	1,566,085	15	10
making a total of	£2,723,742	8	1

Employment has been found for this large sum without any extraordinary effort, such as employing paid agents to introduce borrowers, or a special and expensive system of advertising, and on such safe securities that the whole amount of losses sustained by the society, as we are informed by the manager, has not been more than £1,200.

Such has been the successful career of the Leeds society, which was the first, we believe, to adopt the principles we have propounded, and it will be evident, we think, that the formation of such a society necessarily led to a close examination of every principle vitally affecting the constitution of Building Societies, and from such examination it was apparent that many of their leading features were of a very arbitrary and unjust character. With these the promoters determined to grapple, and, if possible, entirely remove. How far they succeeded in doing so, and the means they adopted to accomplish so desirable an object, the sequel will show.

(To be continued.)

## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE opening meeting of this body was held on the 5th inst. The president (Mr. Charles Barry) occupied the chair.

The decease of four members of the Institute during the recess was announced.

The President read a list of the names of forty-one noblemen and gentlemen who had applied to be admitted as Honorary Associates.

Portraits of Sir Gilbert Scott and of the late Sir Digby Wyatt were presented to the Institute.

The Ashpitel book prizes were then handed to the gentlemen who had distinguished themselves in the Architectural Examinations of 1877.

The President then proceeded to deliver his inaugural address, of which we print some portions of the first of the two divisions into which he separated it:—

*As to its Inner Life.*—We have been passing through a year as remarkable and important as even that when the institute was first founded by earnest men who desired to give coherence to those whose thoughts, studies, and professional avocations should naturally lead them to associate, but who then were working singly and unaided by the advice and sympathy of their fellows; well, I think, has that effort been rewarded, as may be seen [in the fact that in] 1876 upwards of 600 professional members, practising in and out of the metropolis, had enrolled themselves as members of the institute. And

now that large body of our professional brethren having become so happily united in feeling though retaining individually the distinctness and vigour of original tastes and liberty of different lines of thought, have desired to consider carefully whether in any way their organization might be made better—more powerful and cordial as between themselves, and more really useful to the public, which oftentimes willingly, but sometimes grudgingly (for want of information only), seeks the aid of our services. With this view, as you all know, more than one committee of earnest men have laboured, and the result of all their labour has been seen in the revised bye-laws, which dating from the year 1877 will for some time to come, at all events, guide and govern our action. I am bold to say, that, taken as a whole, the aims and objects of architects are noble. They desire so to study the works of great men, from the earliest ages of art history, that they may be assimilated with the art instincts and the practical wants of our own day, that thus we may hand on unbroken the golden chain to those who are to succeed us. They are placed of necessity in a position of infinite trust, in their action for the pecuniary interest of their clients on the one hand, and, on the other, their sense of honest dealing towards those who work under their direction; and may I not be justified in saying proudly that with very rare exceptions indeed, that trust is honourable discharged. If then architects are not (as I think we must admit they are not invariably) credited by the public with this double effort to be the "accomplished artist," and at the same time the "trusted agent," it may be, and it has been thought must be, from the fact that too little personal intercourse has hitherto existed between practising architects and those outside their ranks (and they are many) who take a real and earnest interest in their work, and would fain know more of it if opportunity were given. This opportunity will be given by the creation of the new class, and through it our artistic brethren in the other walks of fine arts of painting and sculpture—our amateur architects, of whom many are distinguished and entitled to our respect,—our Church dignitaries, whose duties in the sustentation, care, and repair of our national cathedrals and churches, lead them so frequently to express their desire to know more of architecture in its practice than they do—our civil engineers, who have such great power from the magnitude of their works to create a "nightmare" or a "joy for ever"—our antiquaries and archaeologists—our members of each house of Parliament, who have often to decide questions relating to our art and practice, and who sometimes so piteously confess their inability from lack of knowledge to do so to their own conscientious satisfaction, may, and I hope will, by becoming honorary associates here, gain much of the special knowledge they desire—will doubtless learn that architects have nobler aims than are represented by 5 per cent., and, albeit that represents their livelihood, can and do put it in a secondary position in relation to their clients.

During the year past, I think I may claim that the subjects brought under our notice, and on which animated and instructive discussions have taken place, have been at least equal in importance and interest to those of former years. Even when, as on one occasion, questions of a seemingly personal nature were mooted, the interest evoked did not become too zealous to be courteously expressed, and even the distinguished individuals who were named by the writer of the paper to which I allude can hardly have felt more than momentary annoyance at his strictures, as they and we must remember that they were thus singled out from others by reason of their acknowledged eminence. The paper by Mr. Stevenson opened up a most interesting question, and one likely to agitate the architectural profession and their clients for some time to come. I will, therefore, ask your indulgence while I allude to

this subject. While there could be no doubt of the talent of the writer in humorous, good-natured satiro and well-turned epigrams, yet that will not compensate for the absence of that sort of argument which convinces, and which leads the judgment and practice of the hearer to follow the advice of the orator. The line of thought taken by Mr. Stevenson, and those who style themselves the "preservers of ancient buildings," seems to be that though architecture has confessedly, for as many ages as we have record of, been continually changing and adapting itself to the tastes and wants of the people, yet when we approach the particular epoch of Queen Anne's time they tell us we are to stay our hands, acknowledged that an architectural millennium was then at last attained, confess our absolute incapacity as artists, and suffer our old buildings—whether domestic or ecclesiastical—to remain untouched, however unsuitable to our requirements, in order that "a link of history" may not be lost. I do not hesitate to traverse this issue under both heads—the æsthetical and the practical. I will not admit that in an age when, in consequence of the vitality of that "love, reverence, and religion" (which is so pathetically said to have passed away), more study and real learning has actually been given to the production and judicious preservation of old buildings than for several preceding generations, and when more real work is done in one year than in ten years of former times, all that study and all that earnestness and all that work shall lead to no result creditable to our age. We living in it cannot, of course, presume to pronounce definitely on the comparative value of our work with that of those preceding or to succeed us; posterity must do that. But I venture to think that the works of a Scott and a Street, and of my own father, will tell a noble story of our time, and that it will need all the learning and patient study of the young men of the present day, to whose criticisms we have listened, to equal or surpass them. Nor can I, for one, believe that such result will be achieved to the satisfaction of posterity through the medium of that curious mixture of all proportion or no proportion, as it seems to me, called the Queen Anne style, which seems just now to find so much favour.

These remarks apply to our domestic and public buildings; but how much stronger does the argument become when applied to our cathedrals and churches throughout the land. Surely in dealing with them we have no right to forget or ignore the original all-important intent with which they were erected, for which they were then well adapted, but now are often ill-adapted, though equally needed, viz.: for the public worship of God. That originally was, and must still be, the primary—almost the exclusive—thought, far before æsthetical considerations or the idea so strongly urged on us that we ought to regard our churches as ruinous records or museums of the artistic ideas (good sometimes but often very bad and hideous) of generations past. No: let us have some confidence in ourselves, and with all humility, yet without fear, deal with our old buildings, and especially our churches, as our forefathers in architecture uniformly did—adapting them, altering them, and even removing them altogether if quite unsuitable to our needs; preserving their historical features with all loving care when possible, but subject, as regards our ecclesiastical buildings, to the above primary necessity. It is not too much to say that it is in consequence of such treatment by past architects that our old buildings have not lost, but largely gained, in interest for students; and so it may be I hope and believe with many of the restorations and adaptations of our time, taking them as a whole, to the students of the future.

The President closed his remarks under the first head by a mournful notice of those members who had been removed by death during the past year.



## DOINGS IN KINGSTOWN AND BLACKROCK.

At the monthly meeting of the Kingstown Commissioners several matters bearing upon the improvement of the township were considered. Asphalt crossings were ordered opposite Monkstown Lodge and Rathdown Hospital. It was resolved to make provision in the estimates next year for the laying of a water main on Adelaide-road; extra lamps ordered, two in Northumberland-avenue and one in Sussex-street; advertisements for the completion of the sea wall at Burdett-avenue to be inserted. The surveyor reported that since the last meeting 2,868 yards of pathways had been asphalted, making a total of 8,201 altogether. A letter was received from the secretary to the Board of Public Works, informing the board that all arrangements for the erection of the new Post-office were completed; and as it was about being built on the same site as the intended Town Hall, the Board of Public Works were anxious to work in conjunction with the commissioners. A deputation, consisting of the Chairman, Messrs. Crosthwaite, Kelly, M'Evoy, Herron, and O'Rorke, was appointed to wait on the Board of Works.

At an adjourned meeting of the Blackrock Commissioners on the same day (6th inst.), Mr. Kelly, in moving that advertisements be inserted in the papers for the construction of a sewer from Thornhill Lodge to Clifden-terrace, said that under the 22nd section of the Nuisance Removal Act they, as the sanitary authority, were bound to effect a proper system of sewerage. The board was under the lash of an order of the Lord Chancellor, and the time would shortly expire. What he now proposed to be done would not prevent them at any future time joining in with the Kingstown Commissioners, but the Kingstown board had no right to interfere. We had all agreed that the Kingstown board was not a reliable authority. After some altercation and discussion the motion was carried.

A subsequent special meeting was held, for the purpose of considering the recommendations of Mr. Stoney, C.E., for the reclamation of the People's Park, and also to ascertain the opinion of the board on the proposed line of tramways from Dublin to Blackrock. The letter of Mr. Stoney was referred to the People's Park Committee. The board consented to the line of tramways being laid down, the township reserving the right to oppose any objectionable clause in the bill before Parliament.

## HOME AND FOREIGN NOTES.

**SUMPTUOUS PAUPERISM.**—At a meeting of the Galway Board of Guardians it was stated that 108 paupers in the workhouse receive in the week 666 eggs, 14lb. of corn flour, 252 pints of porter, 9½ bottles of wine, 42 naggins of brandy, 73 naggins of whiskey, and 34lb. butter.

From a recently-issued report of the Committee formed to promote the institution of a Celtic chair in the University of Edinburgh, it appears that the available fund now amounts to £10,355 19s. 10d., which, as subscriptions continue to flow in, is expected to reach £12,000. Amongst the recent donations is one of £100 from the Duke of Westminster.

**TRAMWAY EXTENSION.**—The following resolution was passed at a late special meeting of the Corporation:—"That leave be granted to the South Dublin District Tramway Company to lay a tram line along the road from Dublin to Blackrock, subject to such clause and conditions as Committee No. 1, to whom this report is referred, may think best for the preservation of the rights of the Corporation."

The Naas Town Commissioners were furnished with six tenders for the supply of a lavatory, &c., in the town hall, namely:—Messrs. Ross, Murray, and Co., Dublin, £112 18s.; Mr. Daniel, Dublin, £87; Mr. Dempsey, Naas, £75 10s.; Mr. Anderson, Dublin, £66; and Mr. W. Johnston, Naas, £48. It was resolved:—"That Mr. Anderson's tender be accepted for best work for £66, provided that he enters into a bond at his own expense, with two sureties in £50 each, to carry out the work properly, and have it completed by 1st January next."

**MUNICIPAL ELECTIONS.**—Neither in Dublin nor in the townships do we expect any radical changes for the better. Men are striving to get in and put others out, in most cases to benefit themselves and not the ratepayers.

**WEXFORD HARBOUR WORKS.**—A report has been received by the Wexford Harbour Commissioners from Sir John Coode relative to the improvement at the entrance of Wexford Harbour. The works recommended will cost about £34,000.

**WEIGHTS AND MEASURES REFORM.**—We hope that the public meeting which has been held to lead to a reform of the Weights and Measures Law will be followed up. It is a movement which should be supported by all our citizens, irrespective of sect or party. The evils and abuses are glaring and long continued, and the time has arrived for putting an end to them once and for ever.

**BRISTOL CATHEDRAL.**—The nave of Bristol Cathedral, which has been in course of construction for ten years, has been opened. It has cost £45,000. We are informed that it has been built on the lines laid down by Abbot Knowles in the fourteenth century, and is 120 ft. long, and 68 ft. wide. In its main features, height of roof, width of arches, &c., it is a copy of the choir, with sufficient variation in the details to show that it is a nineteenth century addition.

Mad dogs are at present having a fine time of it, particularly in Devonshire, where rabies or hydrophobia is becoming quite fashionable. When a sufficient quantity of the virus is equably distributed, and a prince of the blood or a naval chaplain bitten through the nostril, we shall probably have prompt steps taken to muzzle the evil. The dog-tax will be increased, and its collection secured by the amount being made the perquisite of local authorities in aid of the rates. The race of poaching mongrels, biped and quadruped, will also be discouraged. There will thus be found some good in the length of rope given for a time even to mad dogs.—*Broad Arrow.*

**SINGULAR SOURCE OF BREAD POISON.**—Several obscure cases of poisoning having recently occurred in the Moncarix quarter of Paris, inquiry was made, and it was ascertained that the victims had all eaten of the bread baked by one particular baker. Further inquiry elicited the fact that this baker had been in the habit of purchasing the woodwork of old houses for the heating of his ovens, and this woodwork being covered with innumerable coats of lead paint, set free, in burning, enough lead to seriously contaminate the bread. An ordinance of the police was immediately issued forbidding the use of such wood for this purpose, and its employment is now strictly prohibited.

**A NOTE FROM "NO. 1."**—A report was received from the Deputy Surveyor, in which he drew attention to the neglected appearance presented by many thoroughfares, owing to the practice of sweeping out from shops and stalls sawdust, straw, papers, and refuse. It was determined to bring the subject AGAIN under the notice of the Police Commissioners, with a view to proceedings being taken against all persons so offending!! Well done, new broom; our city will soon be clean. Keep on "reporting," until at last the gold-mounted implement is presented as a reward of activity and an acknowledgment that you are

"... a competent officer,  
Able and willing to do what you're told."

**A NON-STIMULANT PHYSICIAN.**—In its obituary notice of the late Dr. William Alexander Davis, who died on the 7th inst., at the ripe age of eighty years, our contemporary the *Telegraph*, has the following:—"On the erection of the Newry Union Workhouse in 1841, out of several candidates, Dr. Davis was elected medical officer—a position which he filled, to the satisfaction of the Guardians and to the advantage of the inmates, up till four months ago, when, owing to rapidly declining health, he sent in his resignation, which was accepted with unaffected regret by the Guardians. During the long period of thirty-six years, which Dr. Davis filled the position of medical officer, he never prescribed brandy, whiskey, or other stimulants to the paupers; the amount of money saved in this way to the ratepayers must amount to something considerable. Notwithstanding the absence of alcohol in the treatment of the sick paupers, the death-rate in the house was lower comparatively than in any other workhouse in Ireland. Dr. Davis, coinciding in opinion with many celebrated medical men, had no faith in alcohol as a curative agent, and he managed very well without it. And yet, notwithstanding this peculiarity of his treatment, we are informed by a Guardian who has had a knowledge of the workhouse for many years, that the paupers generally had a great respect for their medical attendant."

The premises of Messrs. Geoghegan and Co., outfitters, Upper Sackville-street, have been extended so as to admit of additional departments in the linen and ladies' outfitting branches. The recent addition to the warehouse on the ground floor is well lighted and ventilated. One of Musgrave's slow combustion stoves is placed in the centre, and forms an attractive feature therein. Mr. William Hughes, Talbot-street, carried out the works.

## TO CORRESPONDENTS.

E. S. C. (London).—We do not employ clerks for the purpose of furnishing such statistics as you require. We think there are already quite a sufficient number of such publications. Pressure of literary matter obliges us to leave out some communications, notices, and replies to correspondents. We would again remind our correspondents of sending their letters early, and not waiting until the eve of publication, when it is impossible to give them consideration.

## NOTICE.

*We shall be glad to receive from any of our readers notes of works in contemplation or in progress. No charge is made for insertion.*

*Correspondents should send their names and addresses, not necessarily for publication.*

*It is to be distinctly understood that although we give place to letters of correspondents, we do not subscribe editorially to the opinions or statements set forth in same.*

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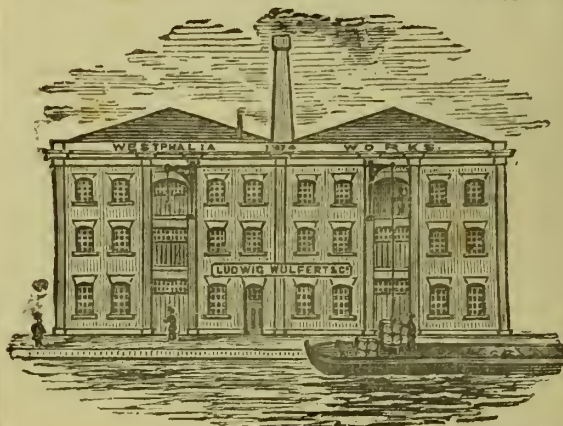
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Illustration.

PRESBYTERIAN  
MEMORIAL SECESSION CHURCH BUILDINGS,  
BOTANIC-AVENUE, BELFAST.

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THE IRISH BUILDER.

VOL. XIX.—No. 431.

THE NORTHERN SUBURBS, AND  
PROJECTED NEW TOWNSHIP.

BILL is being promoted, of which the usual Parliamentary notices required have been published, to create a new township for our northern suburbs, to be called the "Drumcondra, Clonliffe, and Glasnevin Township."

We will not stop now to minutely inquire into the moving springs of the promoters of this bill, nor as to what part the Corpora-

tion of Dublin will play during the progress of the measure before Parliament. Much could be written in favour of forming a new township, and something also could be written against its formation, at least at present.

Believing that the districts included in the projected township will in a few years' time greatly improve through building operations, we look with favour on the new creation. The districts in question are old and historic, and they have as good a right to a township and local rule as their neigh-

our Clontarf on the north-east, or of some other townships on the south of the city, which are populous places now, but which were in our early days hardly more populous and not as fashionable as the northern suburbs.

Presupposing that the bill will run the gauntlet safely through Parliament, there is a large amount of work before the new commissioners; and it is easy to guess who some of them will be, and the amount of mental and business capacity they will likely bring to bear in the performance of their duties.

Many years must pass before the commissioners of the new township will be able to accomplish the mapped-out work which the provisions of the bill will enable them to carry out. It will depend much on the practical sagacity and the business energy that may be found among the members constituting the new body, whether the new township will rapidly improve or slowly creep along.

The localities included in the new township may or may not become a centre or centres of manufacturing industry. In the past, a few if not several branches of industry were carried on, which in time died out, and we do not see why these could not be revived. A large portion of the district is watered by the River Tolka—in fact, this river may be said to divide the new township in the centre. The water power of the Tolka has never been utilised to the measure of its capacity in the past—in fact, the capabilities of this classic river have always been greatly neglected; and between Finglas and Ballybough Bridge only a few mills and a factory or two have existed on this river during the period of a century.

In the future we would like to see the Tolka kept free of sewage and other pollution, and maintained as an open river, adding to the health and beauty of the district, and never allowed to degenerate into an open sewer or an elongated cesspool. Whatever system of drainage may hereafter be carried out it should have no connection with the Tolka. We are aware that in the Drumcondra and adjoining localities there has never been any proper drainage, and wherever any drains did exist in connection with houses, if near the river, the matter found its way there. The old cesspool system exists in this and other districts almost untouched, and the soil in the vicinity of the dwellings is the recipient of the filth. The more heavy and less poisonous matter may be carted away, but, for want of a system of house drains and sewerage, the soil is for years in several places thoroughly impregnated with sewage poison, and aids to the generation of disease are never absent. The first work, then, of the new commissioners should be the carrying out of a system of drainage and sewerage for the district. Now is the time, while large portions of the district are but sparsely populated, and when the work can be done with less expense and trouble. With a good system of sewerage other improvements will follow in due time.

Some time before the close of the last century the Drumcondra and Glasnevin district had a promising future before it. For a time even at the commencement of the present century the tide of building improvement set in on either side of Lower Dorset-street, extending to the "Big Tree," and even beyond. The medical faculty of old were in the habit of recommending patients and invalids to reside in Drumcondra and Glasnevin, for the purity of the air of these districts was long acknowledged. There was a mixture of the sea air of Clontarf shore and the inland air, and people were disposed in days past to speak highly of the combination and its effects in restoring the weakly to health.

One of the causes which helped to retard the progress and improvement of the northern suburbs in former years was the long-continued existence of a large number of turnpikes, compelling people who wished to reside in the northern quarter, or visitors wishing to take a drive for the benefit of their health, to pay from one to several shil-

lings for tolls, according to the distance they proceeded.

When Mountjoy-square was formed in the last century, and the houses in Fitzgibbon and Russell streets erected (the latter street and other houses near to it on the Circular-road being erected, we believe, a few years before the Union), other improvements for the benefit of our northern suburbs were projected or in contemplation. The bridge over the canal at Russell-street was, we believe, erected at the cost of Frederick Jones, *i.e.*, "Buck Jones," the lessee of old Crow-street Theatre. His private mansion at Clonliffe, on the grounds whereon the Clonliffe Catholic College in recent years has been erected, was known as Fortick's Grove. The original owner, from whom it received its name, was Tristram Fortick, the founder of the asylum in Denmark-street. Fortick's gardens were famous as specimens of grotesque and fantastic gardening in the last century. The bridge at Russell-street was erected principally for the accommodation of Jones himself, as a short route to his mansion, though the thoroughfare was made public. With a view of opening a short route from the city and Mountjoy-square to the Richmond, Drumcondra, and Goosegreen district, it was proposed that a new road should be made across the grounds at Clonliffe, in continuation of Russell-street, and then by spanning the Tolka with a bridge, nearly a straight line of communication would then exist from Mountjoy-square to Goosegreen-road between Richmond and Drumcondra.

If this projected road had been carried out in the early years of the present century, it would doubtless have led to the improvement of the Drumcondra district, and building operations would have spread. Many matters, however, conspired to rob the Drumcondra district of promising advantages. The construction of the Dublin and Kingstown Railway helped to turn the tide of fashion from the Drumcondra and Clontarf districts in a southerly direction, and also the adoption of Kingstown instead of Howth as the mail-packet station. Shortly after, owing to building operations, the Rathmines district came into favour, and the southern suburbs for a large extent have gone on for years unimpeded in improvements. A little honest building enterprise, and fair terms on the part of landed property owners in the Drumcondra and Glasnevin districts, will again create an interest in the northern suburbs, and lead to its becoming a fashionable neighbourhood.

Before the opening of Glasnevin Cemetery, Drumcondra churchyard was one of the principal places of burial on the northern suburbs, and in consequence it led to a certain amount of trade activity in the old village in some callings. You would look in vain in Drumcondra in our time for monumental sculptors' and marble masons' yards, several of which may be found in modern Glasnevin or the new village. We say the new village, for the old town of Glasnevin is situated on the Tolka, and nearer to Drumcondra. Many distinguished public men, since the time and before the time of Swift, resided in the Drumcondra and Glasnevin districts—lawyers, churchmen, and public and literary men of note, so the inhabitants of the new township will have reason to be proud of their locality. In coming years when the township expands, when it has its markets, baths and wash-houses and public fountains, it will find in the history of the



locality names which it may worthily perpetuate by the erection of public statues. But we must not run ahead of our subject by discussing what might take place to the exclusion of what should take place as soon as possible after the formation of the new township. We have indicated the work that calls for execution, and that must be done before the township assumes any importance, or commands the attention of those who would be inclined to settle down in it as influential residents or intending manufacturers.

A few words by way of *finis* for the present may not be amiss in relation to portions of the district in an historical point of view. Cluenlyff, or Clonliffe, as now written, was a more extensive district than that which will be included in the new township. It comprised all the lands which lay between the River Liffey and the Tolka, from the sea on the south east, towards the Phoenix Park, which formed its western boundary, and possibly the Park itself was included. The district derives its name from the River Liffey, which is now its southern boundary. The townland of Drishoguo, anciently Drissich, on the west side of Drumcondra-road, facing All Hallows Missionary College, is a name that figures in our ecclesiastical annals. Drissich, or "bushy land," was the name formerly applied to the tract of land east of the Tolka, extending to the sea at Ballybough and Fairview, on the Clontarf-road. The combined districts of the new township lying between Finglas and Clontarf in a diagonal direction is very historic and classic ground, and would afford materials for an interesting chapter or two in national and local history. We must drop our pen here, however; hoping the future township and its local rulers will prove themselves worthy of their trust and their locality.

#### ANENT THE DUBLIN UNIVERSITY MAGAZINE.

WHAT changes and shiftings and inconsistencies does not whirling Time, which also generally brings its revenges, reveal to us! Our old *Dublin University Magazine*, which for several years past has been printed and conducted in London, is about to drop the word "Dublin" from its title-page; or, to speak more correctly, the present conductors of the magazine, under the plea of making it more cosmopolitan in its character, are about to expunge the name of the city where this once celebrated periodical had its birth, and where for long years it was conducted with credit. Now, we know something of the early days of the *Dublin University Magazine*, when Charles Lever, Samuel Lover, Wm. Carleton, Samuel Ferguson, Mortimer and Samuel O'Sullivan, John Anster, Cæsar Otway, Clarence Mangan, Joseph Sheridan Le Fanu, William R. Wilde, Isaac Butt, and scores of others worthy of mention, made its pages brilliant, and when Ireland, and its capital in particular, was proud of its magazine. The publication dates back to the year 1833; but we are not at present going to write its history in detail.

The nationality of the original projectors and conductors of the *Dublin University Magazine* was unquestionable. Its first cover had on it a woodcut with round tower, Irish harp, tomb, &c. This cover was used for upwards of a year, when it was replaced by one with a woodcut of Queen Bess, oval in shape. Some few years later a new block of

entire cover with a new Queen Bess was had, the title being in type in two lines. Coming down to January, 1841, we find an engraved fancy floriated lettering was used, and after this the previous type lettering was resumed, which continued till the end of 1847. Here is an incident in its history worth noting in contrast with the movement of its present conductors. In January, 1848, the then proprietors of the magazine in this city made a change which showed that they were not ashamed of the word "Dublin." To show that they were not, they got their printer, Folds, of Bachelor's-walk, to print the word "Dublin" on the cover of the magazine in larger type, and the word "University" small. The change was made, and continued for years. Here is a specimen:—

### THE DUBLIN UNIVERSITY MAGAZINE.

In 1850, on a change of publishers and conductors, another alteration took place. A great turning point—we will not say for the better—in the history of our once native Irish periodical took place at the wind-up of James McGlashan's affairs in this city. The *Dublin University Magazine* passed by purchase into the hands of Messrs. Hurst and Blackett, on the 1st of January, 1856, for the small sum of £750. At the same date the stock, &c., of the publishing house of McGlashan, 50 Upper Sackville-street, was sold to Mr. M. H. Gill for the sum of £2,966 odd. The reason assigned in 1848 for sinking the word "University," or making it small, was that the magazine was known in the London trade as "The Dublin." The present conductors of our once native periodical have assigned their reason, too, for a change; but the truth is, we fear, that the word "Dublin" is obnoxious, and stinks in their nostrils.

Alas! we are fallen on gloomy days, as our national bard once wrote, and

"Star after star decays!"

The late Celtic scholar, John O'Donovan, in his history of Irish family names, and their changes and Anglicisms, cites some lines written by an irate Irish bard to rebuke the recreant spirit of one of his countrymen who changed his once proud and noble name. We forget the whole of the lines just now, but the two concluding ones were, we believe, as follow:—

"Mean skulker from thy noble race,  
Infelix Felix, weep for thy disgrace."

Of what University in future, may we ask, will the *University Magazine* be the accredited mouthpiece or the nominal representative? Possibly we will soon hear that the *Derby-Dublin* or the *London-Dublin Review* will soon drop its title; but most people are aware that the *Dublin Review* has had little Irish about it, save its title, for many years, and that it has wholly been printed and conducted in London. The *Dublin University Magazine* stood on a different footing with our people. The latter was long racy of the soil, which could not be said of the former, though it dealt betimes with Irish questions.

It is needless now to continue our remarks. Henceforth the *University Magazine* will no longer belong to us. Being ashamed of its former title and the place of its birth, its conductors will perhaps have the candour to say it needs no longer Irish subscribers or Irish readers. \*

#### NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

##### ELEVENTH PART.

It is a strange fact that in several of our public libraries of this city there exist no copies of many important architectural and other works originally published in this country. Some of the works we allude to have had second editions brought out in London, and in other instances the Irish editions appear to have been pirated by publishers and booksellers in the same city. The present writer has often watched and hunted up for years copies of works published in the last century on Irish subjects, and failed to find a copy to purchase, and in some instances even one for reference. What he sometimes failed to find in Dublin libraries he has found in London ones, and what he looked for in vain on Dublin book-stalls he several times picked up on street book-stalls in the sister capital. Dublin eighteenth-century editions of popular and once popular authors are yearly getting more scarce and difficult to procure, and many of the second-hand booksellers of London make not a little profit in executing commissions in respect to old Dublin editions bearing upon Irish history, antiquities, and architecture. Some Irish works and Dublin editions of English authors are eagerly hunted up, not for their literary value, but for their curiosity, so to speak, and because they are useful as references for persons engaged in literary pursuits. The Dublin editions of some works published by Faulkner and also by Grierson are not often readily procurable in good condition. A perfect set of Swift's works by Faulkner, notwithstanding the many English editions, will find a ready sale in London.

The work of which we gave a detailed notice in our last paper—"Malton's Views of Dublin,"—although it was printed in London, has always been very popular in this country. Indeed, from the nature of the subject, and from other reasons that need not be specified, "Malton's Views of Dublin" will always be a popular work with Dublin citizens. In passing, we may observe that a good copy of "Malton" was disposed of at the recent sale of the library of Dr. Thomas Willis in this city. The catalogue stated that the copy had "33 plates, with prospectus and list of plates, folio, russia, gilt." Perfect copies like this are not often to be met with at the second-hand booksellers, for, if some plates are not missing, one or other of the maps may.

In 1793 an architectural work was published in this city, which deserves a notice on account of its author, who afterwards became a distinguished architect. The work in question was entitled "Useful and Ornamental Designs in Architecture: Composed in the manner of the Antique and most Improved Taste of the Present Day; the whole being peculiarly adapted for Execution. By Richard Morrison, Architect." This work was a folio, and was published by Crossthwaite. The volume was dedicated to the Archbishop of Cashel, and prefixed was an historical sketch of the rise and progress and extent of architecture, and estimates were given for executing the works of which plans and elevations were supplied. This work of Richard (afterwards Sir Richard) Morrison was first issued in parts, the first number or part containing twelve engravings. Considered with respect to the time, the work was creditably turned out. The author was a pupil of James Gandon, and he could not have had a better master. Sir Richard's father also, John Morrison, was an architect, and possessed mathematical and scientific ability of no small kind. Richard Morrison may be said to have descended from a race of architects and builders, for his father, grandfather, and great grandfather were all in the building line. The family of the Morrisons resided for several generations at Middleton, in the County Cork. Richard Morrison resided for some time at Clonmel before coming to Dublin, and it was while residing



in the former place his afterwards gifted son, William Vitruvius Morrison, was born in April, 1793. This son, alas! died young in 1838, but not too young or before he proved the possession of abilities that would have done any architect credit.

In the August number of the *Anthologia Hibernica* for 1793 there is a contribution entitled "Observations on the Giant's Causeway, in the County Antrim. By R. Morrison Architect, Clonmell." This paper is a very interesting one, coming from the pen of a native architect; and we are not aware that this curious basaltic formation on our coast had ever previously or since been described by a professional architect. Sir Richard Morrison lived to an advanced age, dying in 1849. His works and those of his son, William Vitruvius Morrison, are numerous in this country. In 1844, when appealed to for his opinion on behalf of Irish art and artists, when a statue in this city to a patriotic and literary Irishman was about being *jobbed* away, Sir Richard Morrison honestly gave his opinion that there were artists in this country at the time capable of executing any work of art, and that there was no necessity for sending the work out of the country.

In 1793 was also published in Dublin, in two volumes, the first English translation of the "Ogygia of Roderick O'Flaherty." The title page of this Dublin edition runs:—"Ogygia, or a Chronological Account of Irish Events, collected from very Ancient Documents, faithfully compared and supported by the Genealogical and Chronological aid of the Sacred and Profane Writings of the First Nations of the Globe." Written originally in Latin by Roderick O'Flaherty, Esq. Translated by the Rev. James Hely, A.B. Dublin: Printed by W. M'Kenzie, No. 33 College-green. The "Translator's Address" and account of the work is "most humbly inscribed to the Irish Nation," and is dated from Trinity-College. Mr. Hely tells his readers that he presents them with the translation of a work "which has within the course of those fifty or sixty years past been undertaken by several, but has never been completed till now." He gives some very scant details of O'Flaherty's life, for which he was indebted to Charles O'Connor, of Belanagar. The translator acknowledges his indebtedness to Theophilus O'Flanagan, for his friendship and attention during the course of his labour of translation. He credits O'Flanagan with a profound knowledge of the language and antiquities of his country; but Celtic scholars of later times are not agreed on that point. Mr. Hely also says his grateful acknowledgments are due to Ralph Ousley, Esq., of Limerick, M.R.I.A., "who encouraged me to translate the work, and whose approbation of it, when finished, I was happy to obtain." During the course of his address the translator speaks favourably of the labours of Colonel Vallancey, and gives a rub to those critics of the day—"gentlemen who employ themselves in endeavouring to detect mistakes in Colonel Vallancey's etymologies, and after so glorious an exploit, filling volumes with the superior savageness of our old inhabitants; an assertion, which if a fact, might surely be confined to a sheet of paper." Hely had evidently the Rev. Edward Ledwich and his coadjutors in his mind's eye, when he alluded to Vallancey's detractors. We have not far to go afield to prove the truth of our belief. In the March number of the *Anthologia Hibernica* for 1793 there is a review or notice of Hely's translation of O'Flaherty's work, and it was not to be expected in a periodical of which Ledwich was the guiding spirit, that O'Flaherty or his translator would get much praise. We are tempted to quote the whole of the *Anthologia* review:—

"O'Flaherty has endeavoured to give a body and shape, in his *Ogygia*, to the fleeting and unsubstantial tales of bards and senachies. He endeavours to establish Irish history on chronology, genealogies, and tradition.—These are excellent grounds could they be supported; but, unfortunately, they cannot. Stillingfleet, in the preface to his *British churches*, supplants the first, by ob-

serving, that the Irish accounts are undeserving notice, as they have no characters of time determined by eclipses and astronomical observations. O'Connor, in his notes on *Ogygia Vindicated*, gives up the Irish genealogies as very inartificially formed, and not to be relied on. And, as to tradition, Sir Isaac Newton, in his chronology, declares it does not extend, for the purpose of history, above an hundred years. We cannot, therefore, but smile at an assertion of O'Flaherty's, when he gravely tells us—the Scots landed in Ireland on Friday, the seventh of the moon (the dominical letter being E), the calends of May, and in the year 3698 of the Julian period.—In what he says on this subject, there is not a line that goes to authenticate any of these points.

"What is equally powerful in subverting the mythological history of Ireland, is the pretended MSS. from which it is deduced. If they were antient they would not now be intelligible: for Colonel Vallancey assures us, in his tract on the Punic language, that the Irish of but four hundred years ago totally differs, in sense and orthography, from the present. No man can explain the Brehon laws, though we know they were well understood in the reign of Charles I. if not later: so that the intrinsic merit of O'Flaherty's work, as to information and certainty, is nothing; nor can it be of any use, unless to a retailer of fables.

"In our opinion, Mr. Hely should have appreciated the value of his author before he engaged in the laborious task of translating him. His time could surely have been more advantageously and profitably employed. Besides, it required the knowledge of a veteran antiquary to clear difficulties, and illustrate the text by judicious notes. The translation is literal, and executed with tolerable fidelity. There are some passages which, for want of skill in antiquities, he seems not to understand:—we allude particularly to the thirtieth chapter of the third part, where he treats of the Irish alphabet."

There is a great deal of assertion in the above criticism worthy of the author, who denied the existence of St. Patrick and his labours in Ireland. O'Flaherty may not be correct in several of his dates, or in regard to the identity of some of the very early personages of whom he gives us some account in his history, but he was a diligent historian for all that, and he has given us in his "*Ogygia*" much the truth of which cannot be questioned. Hely's translation is, of course, not the best that could be produced—not such a one as a good Celtic scholar gifted with other requisites would turn out—still it was a work called for at the time, and it paved the way for other works, besides satisfying the long yearning among Irish readers on both sides of the Atlantic. Hely's translation of O'Flaherty's work obtained a very fair share of patronage at the time of its publication, and appended to the first volume there is a good list of subscribers' names. Among these patrons are several of the nobility and gentry, churchmen, members of Parliament, professional men, and noted public and literary men of the day. The volumes are 8vo, and, as specimens of Irish printing, paper, and binding, they will bear favourable comparison with other similar works of the period.

Mr. M'Kenzie, the bookseller and publisher, previous to opening in College-green, carried on business at 63 Dame-street. During the last twenty years of the eighteenth century, he appears to have done a fair share of business in his line, and we meet several works bearing his name, though none of them very large.

During the era of the Irish Parliament one of the most noted publishers and booksellers in Dublin, was Patrick Byrne, 108 Grafton-street. Byrne added to his other business that of lottery-office keeper—a business that several other booksellers in Dublin at the time carried on with profit. In 1784, and previous, Byrne lived in College-green; but it was not until the last decade of the eighteenth century that he became prominently noticeable. The most of the works issued by Byrne were of a political kind, and many of them pamphlets bearing upon parliamentary reform and Catholic emancipation, and other political and religious questions. Byrne was publisher of some of Wolfe Tone's pamphlets, and others of the "United Irishmen." "Byrne's shop," says Mr. Gilbert in his "History of Dublin," "in Grafton-street

was the usual literary rendezvous of the United Irishmen; and the publisher himself, a member of that association, was the first Roman Catholic admitted to the guild of booksellers after the relaxation of the penal laws in 1793." There were other Roman Catholics admitted to the guild of stationers and booksellers at the same date as Byrne, for we find in a public print of the time (July 2nd, 1793):—"This day being quarter day of the Corporation of Cutlers, Painters-Stainers, and Stationers, or Guild of St. Luke, the following gentlemen of the Roman Catholic persuasion were unanimously admitted to the freedom of the said corporation, in pursuance of the act of the present session: Thomas M'Donnell, stationer; Richard Cross, do.; Patrick Wogan, do.; Patrick Byrne, do.; Hugh Fitzpatrick, do.; Peter Hoey, do., &c." The three other Catholics admitted to the guild were painters, namely, Luke Dempsey, John O'Neill, and Thomas Smith. The six first named were either booksellers, publishers, or printers—in some cases all combined.

The once remarkable letters of Joseph Pollock—"Letters to the Inhabitants of the Town and Lordship of Newry"—were published by Byrne in 1793. Pollock was nominated from the town of Newry to the convention at Dungannon; but, not subscribing to the sentiments of the majority on public measures, he states in his published letters his own opinions, and the reasons on which they are grounded. Some of his criticisms are severe, and his style vigorous. Pollock took an active part in the first Dungannon meeting of 1782, and also in the one early in 1793. At this last convention there were fifteen resolutions passed, strongly expressive of the emancipation of the Roman Catholics, parliamentary reform, and the rejection of a national militia. Pollock's pamphlet gives the private history of this convention from his own point of view. Pollock certainly went in for reform, but he feared to commit himself to the advanced views of the United Irishmen. Joseph Pollock was a barrister of some note in his day, and practised for several years in Dublin. He was called to the bar in 1778, and lived for sometime at 68 Marlborough-street. Before the close of the last century he became a Commissioner of Bankrupts, and resided in North Earl-street.

Among other works published by Byrne, about the same period as Pollock's pamphlet, was "Mullala's Political History of Ireland," 8vo, and Bishop Troy's "Pastoral Letter on the Duties of Christian Citizens." This letter of Dr. Troy gave rise at the time to considerable public discussion, and uneasiness on the part of members of the State Church, and counter pamphlets were the consequence, dealing with Bishop Troy's views, political and religious. The era of the Irish Parliament was truly the era of religious and political pamphleteering, and Byrne and other Dublin booksellers and publishers of the time issued a legion of them.

On the 23rd of January, 1793, Byrne's house in Grafton-street suddenly fell, but the family were apprised in time to make their escape. By this accident Byrne sustained a considerable loss, as he had a large and valuable stock of books, which were buried in the ruin. A public print of the day, in alluding to the fall of Byrne's house, thus brackets a chapter of accidents and coincidents occurring together:—"The bridge lately erected between the New Custom House and Ballybough, by the Royal Canal Company [Newcomen Bridge] fell yesterday, killed two of the labourers in the canal and much wounded others. The circumstances in which Mr. Byrne at present stands render him worthy of peculiar commiseration. In consequence of the fire at Richardson's [Benjamin Richardson, a woollen draper, next door], he suffered very considerably—the fall of his house and the innumerable losses and inconveniences which such a calamity must necessarily induce, are owing entirely to the same melancholy event. It is not a little remarkable that the canal boat



overset and Mr. Richardson's house was burnt on one and the same day, and at the same hour the canal bridge and Mr. Byrne's house fell."

The works issued by Byrne were generally creditably turned out, and he appears to have done a brisk trade. There is reason, however, for thinking that Byrne's political proclivities, and his advanced opinions at the time coupled with his creed, injured him in a business way, and limited his publications to a certain order. As his shop was the resort of several of the United Irishmen and their sympathisers, of course the bookseller himself was suspected and his loyalty valued at little worth by the government agents at that stirring period of Irish history. Politics and passions aside, the name of Patrick Byrne will live in the literary annals of Dublin as a noted publisher and bookseller.

#### NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

SEVERAL actors and actresses, of whom our dramatic annals afford us little information, made their appearance on the Dublin stage during the rivalry between Barry and Mossop. We also find, at the period of which we are treating, several noted performers constantly changed sides, appearing alternately at Smock-alley and Crow-street, sometimes coaxed to desert through the offer of a higher salary, and at other times led through personal interests to range themselves on what they might consider the winning side. The fortunes of the rival theatres were constantly rising and falling—one time Crow-street promising to crush Smock-alley out of existence, and anon the latter rising *per saltum* from the very depths of despair, and winning back the greater portion of the public patronage.

During 1761, among other actors of merit who came from England to Crow-street was Stamper, who obtained a reputation by acting such characters as the Miser, Scrub, and others of a similar kind. Through the bringing out of Italian burlettas at Smock-alley, Mossop succeeded for a time in raising the position of his theatre, and he had a good run of success. Smock-alley became noted for a time for burlettas and operatic entertainments. Fortune for a while smiled on Mossop's efforts, and his engagements proved successful.

The Smock-alley manager, remembering the former popularity of Wilkinson when in Dublin, bethought he would again prove an acquisition, so he concluded a treaty with him for twelve nights and a benefit. In January, 1762, Wilkinson appeared in Foote's comedy of the "Minor," representing the characters of Mrs. Cole, Shift, Smith, Transfer, and Dr. Squintin. Two years previous this piece was a failure, but on the present occasion it turned out lucky by bringing a number of good houses. The Crow-street management made overtures through Woodward to Wilkinson, offering him twenty guineas for four nights and a clear benefit, which the latter accepted. At Crow-street, Wilkinson appeared in Kitley in "Every Man in his Humour," Woodward playing Bobadil; and good houses were the result. In the month of June Wilkinson returned to London, well pleased with his reception in Dublin.

The comic opera of "La Cascina," was after considerable preparation, brought out in December at Smock-alley. The principal characters were by Signior Antonio Minelli (the director of the burletta), Signior Dominico de Amicis, Signior Giovan Battista Zingoni, Signiora Anna Dunlop, and Signiora Anna Lucia de Amicis; the music by Gallupi; the dances by Signior Tioli, Signior Giuseppe Genavisi, Signiora Ricci, and Signiora Vincenze Lucchi. On this occasion boxes and pit were laid together at 5s.; the galleries at the usual prices. This burletta, we read, pleased much, and the performers in general

were approved of, particularly Anna Lucia de Amicis. A good deal of money was drawn by this burletta, which was continued during the season. This Italian corps shortly quarrelled among themselves, which led to the withdrawal of the original director, Minelli, who was obliged to resign to De Amicis, whose family comprised the principal part of the entertainment. The altercation led to Minelli becoming a citizen of Dublin, and his settling down in the wine trade—a business which appears to have become a man of worth and character. The name of "Antonio Minelli, wine merchant, 51 Abbey-street," may be found in our old Dublin directories. The whilom director of Italian burlettas also lived, we believe, for some years on Bachelor's-walk.

The following burlettas were produced by Mossop at Smock-alley during his management:—"La Finta Sposa," "G'Intrigue per Amore," "Il Mercato di Malmantile," "La Creanza," "Il Tutore Barlotto," "Li due Rivali," and "La Serva Padrona," with music by Pergolesi. In January, 1762, Kane O'Hara's burletta of "Midas" was brought out at Crow-street with the object of ridiculing the Italian burlettas at Smock-alley. This burletta was under the conduct of Joseph Vernon, but we give the performers in their mock characters:—Signior Josephi Vernoni, Signior Patrico Mahoni, Signior Lewis Olivero, Signiora Fredrifundi Bridges, Signiora Elibetta Gloverina, and Signiora Maria Juvanelli; with dancing by Slingsby, who afterwards became celebrated in his line in London and Paris. The burletta of "Midas" was well supported at Crow-street, and on the fourth night of its representation the Lord Lieutenant (the Earl of Halifax) attended.

The author of "Midas," Kane O'Hara, it is almost needless to say, was a native of this country. He came of a respectable family, and was well known in fashionable circles in the city. He resided for several years in the neighbourhood of Dublin, and was credited with having an exquisite taste in music. Towards the close of his life he seldom went abroad from home, and it appears from one account that he was deprived of his eyesight. In producing rhymes and adapting new words to old music, O'Hara was said to have no equal in his time. He is known as the author of the following pieces, in addition to "Midas":—"The Golden Pippin," 1773, "The Two Misers," 1775, "April Day," 1777, and "Tom Thumb," 1780.

Notwithstanding the efforts of the Crow-street managers, Mossop held his ground, and Smock-alley continued to be better attended. The noted Countess of Brandon, who was a hot partizan of Mossop, often attended at Smock-alley, and afforded the manager still more practical support. Mrs. Fitzhenry was a great acquisition at Smock-alley, and the pieces in which she and Mossop appeared generally drew good houses. About this time an accession was made to the strength of the company by the appearance of Reddish, who made his *début* on the Irish Stage in the character of Etan in the "Orphan of China." Samuel Reddish received a warm reception, according to Hitchcock, and "made a most favourable reception on the audience by his figure, voice, manner, and other requisites." Reddish remained several years in Ireland, and on his return to London, according to the same authority, was much esteemed and admired. This actor, who died in York in 1785, is stated to have married Mrs. Canning, the mother of George Canning, the celebrated statesman, whose father on the paternal side was of Irish extraction. Genesta throws a doubt on this marriage by affirming that Mrs. Canning had at one time such a friendship for Reddish that she assumed his name. There appears, however, to be little doubt of this marriage, for Robert Bell in his "Life of George Canning," declares that her marriage "rests on an authority which properly closes all discussion upon the subject." Although Reddish won a name in Dublin for good acting there are some English dramatic critics

who accounted him an indifferent actor, and clumsy in appearance as well as vulgar in face. The last days of Reddish, however bright and promising his early ones might have been, were sad enough. He passed through a variety of "disgraceful escapades," writes Bell, and that he "became diseased in his brain appeared for the last time in 1779, as Posthumus was thrown upon the Fund for support, and lingered out the remnant of his wretched life as a maniac in York Asylum."

In the production of Murphy's comedy of "All in the Wrong," the managers of both theatres set themselves to outstretch each other. The reception the comedy met with in London prompted its reproduction at Crow-street, where its rehearsal was announced with much pomp. The Crow-street managers little dreamt of the surprise that was in store for them. For five or six days Murphy's comedy was also the subject of study at Smock-alley, and unexpectedly one morning, without previous notice, an announcement appeared that it would be produced at the latter theatre on that evening. Smock-alley thus stole a march upon Crow-street, getting six days clear start of them. When it was produced at the latter theatre it failed to draw any large audiences, and neither theatre appears to have reaped much profit by its production. The play was acted for sixteen nights during the season at Smock-alley. The Crow-street management provided a treat for the Dublin public by the engagement of Mrs. Pritchard, who made her appearance on June 14th, 1762, in Lady Macbeth. She drew a very crowded house. Her next character was Mrs. Oakley, which she repeated twice. Respecting this actress's appearance and reception in Dublin, Hitchcock writes:—"Though in the decline of life yet such was the superior force of her powers that she charmed the critical part of her auditors to the highest degree. But her figure operated much in her disfavour with many. Youth and beauty on the stage make impressions which merit, unassisted by these powerful auxiliaries, can seldom obtain. . . . Whether from necessity or whatever other motive I know not, but we find this lady placed in several situations in which, notwithstanding her uncommon merit, she must appear from her figure to little advantage, as Mrs. Sullen, Lady Betty, Modish, Clarinda, and Jane Shore. However, she made ample amends in Zara and Merope." With the last-named character Mrs. Pritchard closed the theatre on July 19th, when she returned to England, leaving a favourable impression on her Irish audience.

Temporary success at Crow-street was not sufficient to beat back the tide of misfortune which was fastly rising. The attendance once a week of the Lord Lieutenant, though it brought a larger audience on each occasion, yet the receipts went but a short way in paying the working expenses of the theatre. Pantomimes proved for a while attractive, but they were expensively got up, and the tragedy processions were equally so. The disbursements at last were altogether out of proportion with the receipts, and a rupture between the joint managers took place. The difficulties that beset the path of Barry and Woodward naturally led to misunderstandings, and shortly to a final separation.

"JERRY" BUILDING.—"I am told on creditable authority (says the correspondent of the Birmingham Daily Mail) of a remarkably neat manœuvre executed by a 'Jerry' builder of the most artful type. His suburban houses were duly inspected by the local officer when in course of erection. The regulation 9-in. walls, were apparent everywhere, and even the out-houses and other walls showed the required thickness of brick. The official duly passed the work; but hardly had he turned his back when hey! presto! down was pulled a big portion of the out-house walls, so that the old unsafe 'single brick' alone remained. The extra layer had merely been built up temporarily to satisfy the authorities. I am told this is a favourite device with the gentlemen of the 'Jerry' persuasion. If so, a second visit of inspection when the building is complete may be rendered necessary."

\* See ante.



## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

## THE PRESIDENT'S ADDRESS.

(Concluded from page 342.)

IN the second division of his address the president alluded to the recognition of the institute by the Prince of Wales. Having undertaken (he said) the post of president of the British section of the Paris Exhibition, and having thrown himself into the work and duties of that position with a zeal and an amount of ability for which all who (like myself) have had opportunity to observe and admire feel most grateful to him, the Prince felt that, connected as he personally is with their institute, he need only call on its members to aid him, so far as architecture was concerned, to the best of their power to ensure their doing so. The compliment intended by his Royal Highness to be paid to the whole body, by its president being placed on the Royal Commission, has, I know, been warmly appreciated by every member. It remains now, therefore, for us to show by the character, originality, and excellence of the works to be sent to the architectural portion of the British Fine Arts Exhibition, that the confidence thus placed in us by our royal patron has been justified. You are aware that a special committee of our members has been formed to carry out the necessary arrangements. A circular letter has been addressed to those who have been contributors to former exhibitions, and advertisements have been inserted in the public journals, inviting those who may not have been thus specially addressed to forward drawings of some of their best works executed by them during the last ten years.

I may allude next to the application of the Local Government Board to this institute to aid them with advice and suggestions on the new code of building regulations, which has for some time been in course of preparation by the board, with the hope and intent of introducing throughout the kingdom some general rules to be observed uniformly, and to take the place of the confused and conflicting codes of regulation now in force, consequent on the absence of intercommunication of the numerous local boards by whom these regulations have been issued. It will hardly be believed, but it is a fact that within a radius of twenty miles around the centre of Liverpool no less than thirty-four local boards, each with a set of rules more or less different from the rest, are in force. The same confusion exists very generally, to the distraction of architects, who in all good faith and innocence find themselves often transgressing some of these local rules. There is good reason, therefore, for the proposed action of the Local Government Board, who deserve any assistance that can be rendered to them in their by no means easy task. The council of the institute at once, therefore, met the request of the board in the same cordial spirit in which, I am glad to say, it was made.

Again, the advice of the council of this Institute has been sought by the committee of the House of Commons, still sitting on the question of "Copyright in Design of Works of Art." The necessity of some kind of recognised law on this subject has long been felt by architects, for the custody of, and property in, their original designs, as embodied in their drawings, has, as you all know, been the subject of frequent painful disputes, which, if contested in the Courts of Law, would entail on the professional man (who is rarely wealthy) much mental vexation and considerable cost, whether he were or were not successful. The consequence is a thorough confusion of practice exists. No actual issue has ever been tried out in one of the superior courts, where all arguments on either side would of course be exhaustively considered. I am glad to say the "Copyright Commission" fully realised how unsatisfactory this is, and admitted that architects had a case for protection. How that was to be afforded, and to what extent limited, was felt by them, and indeed is a

very difficult subject to settle; but it will at any rate be gratifying to the Institute to know that there is every disposition to treat the subject in a manner satisfactory to architects if the members of that Commission can possibly see their way to do so. The proceedings of the Commission are not yet complete, but it is hoped they will present their report this year. The Commission was presided over by the Right Hon. Lord John Manners, whose abilities and courtesy are well known, as well as his interest in architecture and architects, as is evidenced by his now enrolling himself as one of our new class of Honorary Associates.

You will not forget that in the course of last year an animated correspondence took place in the public papers on the subject of "illicit commissions," as they were called, being commonly paid (as was alleged) to professional men by others than their clients, and without their cognisance or consent. The charge was made indiscriminately against men of various professions, and among them architects. I felt it a duty to combat the truth of this charge against us, and especially as regarded the members of the institute, the primary object of which, as we all know, is to preserve and continue "purity of professional action" by every means in its power. The general body fully endorsed more than once all that I had written publicly in their behalf, and I cannot doubt it will be their desire to show their earnestness in any way that may at any time seem feasible. With this view some communications have taken place between your council and Sir Edmund Beckett, who has proposed a bill to the House of Commons which shall inflict a sensible penalty as well as affix a stigma of dishonour on all who might be proven guilty of such practices. That bill was introduced too late to become law last session, but is to be pushed forward this year. Sir Edmund has informed me that it has the full sanction of the law officers of the Crown, to whom it had been referred by the Home Secretary; and the meeting will be glad to hear that, so far from making the charge so general as he and others certainly did in their correspondence in the public papers, he desires it to be understood that, so far as he is concerned, he does not wish to say or imply that it is common with architects, though he is aware of some instances of those who called themselves by that name having adopted this dishonest practice. This being so, it is evident that the objects of Sir Edmund and the institute being identical, they can work cordially together; and your council will, I am sure, have your full assent in considering any well-devised scheme whereby the honest men shall be relieved from calumny, and the dishonest men be exposed as they deserve.

We may lastly turn our attention for a few moments to the further progress of work in classic lands, to which I made allusion in my address last year. I need not further allude to the extraordinary and most interesting discoveries of Dr. Schliemann at Mycenæ and Troy, for you have heard them described in this room by the enthusiastic discoverer himself. After having carefully prepared for publication a full record, duly illustrated, of his discoveries, the Doctor has returned to the scenes of his labour, and is still sanguine of finding more and more proof in support of the theory to which he has committed himself as to the age and destination of the remains unearthed by him and Mrs. Schliemann. As he has now become one of our honorary and corresponding members, he will, I am sure, feel it a pleasure to recognise the claim the members of the institute thus have to be taken into his confidence from time to time should new wonders be laid open to the day.

Other researches in Greece have been proceeding, as for instance at Olympia, and though the past year has not revealed anything very new there, all that has been found has tended to confirm the knowledge previously gained. At "Sparta," in Attica, a tomb has been discovered, containing many gold ornaments, which are supposed by some

to be of the same epoch as those found by Dr. Schliemann at Mycenæ. At "Dodona," a number of inscriptions have been discovered, though no works of art of importance. We may see, therefore, that the spirit of research for all and everything that may throw light on the history or legends of that land, at once the birthplace and centre of all early refined art, is actuating many a zealous explorer, and year by year we may confidently hope to add some little to our stores of knowledge on this most enticing subject of inquiry.

I may not pass on without some allusion to another work of exploration of the greatest interest, and which has been pursued and persevered with under much difficulty and disappointment. I allude to the "Palestine Explorations." It was early felt that, before exploring particular spots in detail, it was almost essential to have a far more correct map than existed of the whole of the country both east and west of the river Jordan. The east side was undertaken by an American committee, who have not, however, made much progress. The west side was undertaken by our own countrymen, and an excellent map has now been nearly completed, after a persistent labour of some years. A tract of country of 7,340 square miles has been accurately surveyed,—the hills shaded on the spot,—on a scale of one inch to the mile; and the map, as accurate as ordnance maps are, is the gratifying result. The sites of about eight times as many places have been identified and marked on it as are shown on the most correct maps previously existing; while, in addition to the land survey thus made, careful measurements have been taken and drawings made of a large number of architectural ruins of all ages, the greater part of which have now been seen and measured for the first time.

As the American society has made little or no progress, I am informed that, should their funds enable them, our own "Palestine Exploration Committee" will now commence a similar map and record of the country on the east side of Jordan. The extremely interesting excavations by Lieutenant Warren, undertaken also at the instance of the Palestine Committee, have been obliged to be suspended for the present. They were, however, so very promising, and they had already afforded so much curious information, that it is to be hoped they may be resumed. With regard, therefore, to all those labouring in distant lands in matters of such great interest to us here as architects or archaeologists, and remembering how earnestly Dr. Schliemann assured us that one of the greatest incentives an explorer can have is to feel that he is not alone, but has the interest, regard, and good wishes of the sympathisers all over the world, I may, I am sure, as last year, on behalf of this Institute, wish "God speed" to all who thus are labouring abroad.

And now, gentlemen, before closing what I fear has been too long an address, there is but one word more I wish to say, and it is that it will be well for us in the papers to be read in this room very often to choose subjects of a thoroughly practical character. A charge is frequently reiterated (though as often contradicted) against architects, that they think too exclusively of the artistic effect and external beauty of their buildings, and disregard partly or altogether the important questions relating to the health, comfort, and convenience of those who are to live therein. I recently heard a noble lord, in a public address made by him, roundly assert that architects were "ignorant" of all these matters, alluding to questions of ventilation, warming, and drainage. You will know how unfounded this really is. Again, the City Librarian said the other day that the bones of libraries were architects and gas. It was, indeed, well said in reply to him, by a kindly non-professional defender of the architect, that if those who were about to build libraries or other buildings really knew their own wants, and could intelligibly explain them, there would be fewer of such complaints. This is perfectly true. The undeserved



blame for all the mistakes of clients,—their imperfect perceptions,—their non-power of realisation of their requests (which nevertheless the architect is bound to attempt to comply with), are heaped on the devoted head of the unfortunate architect. We cannot, I know, expect this state of things suddenly to alter in our favour, but we may learn from our detractors a lesson of Christian submission to unmerited blame, and also learn how needful it is, in these days of extensively diffused scientific knowledge and scientific inquiry, to pursue exhaustively our inquiries into these scientific and practically important subjects, and to do our best to put ourselves in a position to challenge our accusers to the proof of their assertions from any buildings erected under the care of architects of experience, when they have been treated with due confidence by their clients. Let us welcome, then, the discussion of these matters, and it may be that we shall do more thereby to add to the power of the architects of the next generation to carry out large works, beautiful works, and works distinguished by their sanitary excellence, than we ever can by the more exciting discussions whether architecture attained its maximum excellence in the thirteenth century or in the days of Queen Anne.

Sir Gilbert Scott proposed a hearty vote of thanks to the president for his able and comprehensive address, which was remarkable for the large number of important subjects with which it dealt. During the past year the institute had undergone re-organisation and change in many respects. The president had ably laid before the meeting the principal points involved in the changes, besides referring to numerous outside matters. In fact, the one thing that had astonished him (Sir Gilbert) in the president's address, in addition to the industry necessary for its compilation, was the power of condensation it exhibited, enabling reference to be made to almost an infinity of subjects in a short space of time. Without attempting to traverse all that had been said in the address, he (Sir Gilbert) felt bound to follow up what had been said by the president in congratulating the institute on the result of some of the changes which had taken place in the inner life of the institute. As far as he knew and heard, they had organised a most admirable council, who had worked together very satisfactorily. As to the new class of members, "Honorary Associates," the candidates for membership under that title whose names had been read were men of the highest position and attainments, and they could not fail to be a great acquisition to the institute. On important and special occasions, when subjects of peculiar interest were under discussion, some of the gentlemen whose names had been read had contributed materially to the information elicited. The president had rightly said that the new class of Honorary Associates might learn much from the architects, but, on the other hand, the architects would learn a great deal from the new class of members. It was gratifying to find that the re-organised council had re-elected the president, whose nomination reflected infinite credit on the former council. As to the sad list of lost members, the president had said, and said well, what the general body of members would say of the grievous losses they had undergone. As to his (Sir Gilbert's) dear friends, Sir Digby Wyatt and Mr. Edmund Sharpe, he had said a few words during the past session. As to poor dear Talbot Bury, the president had omitted to say one thing about him, viz., that he was a pupil of the elder Pugin. The tragical end of poor Raphael Brandon he could not help thinking of; a more good-hearted man never existed; but his sad career and end were not what might have been hoped for from a man of his talents and ability. He would not attempt to say one word on the subject of "restoration." He could quite follow the president on that subject, and he was quite sure about poor Queen Anne; but "*de mortuis nil nisi bonum.*"

Mr. T. H. Wyatt, in seconding the motion, expressed his regret that Professor Donaldson was unable to be present to fulfil that pleasing duty. He could only express his very great admiration of the energy and labour which the president must have bestowed upon his address, which showed the great personal interest which he had taken in the welfare of the institute. He (Mr. Wyatt) highly appreciated the way in which the council had managed what he might term the "outer affairs" of the institute, one result of their management being that the institute now held a much better position in the estimation of public bodies and Government Departments than it had hitherto enjoyed.

### BUILDING SOCIETIES.\*

(Continued from page 342.)

**INVESTORS.**—One of the injustices felt to exist was, that an investing member never knew what his exact pecuniary position was, or what he was entitled to receive if he wanted to withdraw. For, although the society might have tables containing the information, yet the directors had such discretionary power, which was often used in a very arbitrary manner against withdrawing members, that it became next to impossible to calculate what amount they would be paid. This practice was considered to be not only very objectionable, but a great hardship upon those members who are often compelled by adverse circumstances to withdraw their subscriptions, and therefore are most in need of every penny of their legitimately-earned interest and profit. Hence the usual discretionary power invested in the directors was withheld, and it was determined that investing members, on withdrawal, should be allowed to have what was shown to be due to them by the tables of the society up to the time of withdrawal, and also any bonus which had been declared, in addition thereto. To carry out this determination, tables were adopted and attached to the rules, so plainly and clearly constructed that an investor, at the end of any month, was enabled, without reference to any official, to ascertain for himself what was due to him, having merely to refer to his subscription-book and ascertain the amount he had paid per share, and opposite that amount in the tables was the interest, and in the next column the total amount of subscriptions and interest due on withdrawal. This course not only remedied the injustice, but at the same time made the operations of the society clear and intelligible.

**BORROWERS.**—It was found that the rate of interest at which the loan was to be granted was scarcely ever mentioned, or, if any statement was made with reference thereto, it was generally very vague and unsatisfactory, if not grossly misrepresented. Now, we submit that a borrower has as much right to know the interest he is to pay, as an investor the interest he is to receive. It is true, societies put before a borrower how many fixed monthly or other instalments he is to pay for his loan, for a given period; but, on account of the peculiar nature of the calculation required, he cannot ascertain therefrom what is the rate of interest he is to pay; nor is it intended that he should; and if he should ask the question, what the rate of interest is, he will be a fortunate man, and the society a very exceptional one, if the answer he receives is even a decent approximation to the truth. When we recently made such an enquiry of a society in London, we were told that the rate was  $4\frac{1}{2}$  per cent., when in fact it was  $7\frac{1}{2}$  per cent. per annum. The practice under the cloak of which this misrepresentation is made, is to add interest upon the amount of a share, say £100, for the whole term, say 10 years at  $4\frac{1}{2}$  per cent., divide the amount of principal and interest by 120 months, and make the member pay

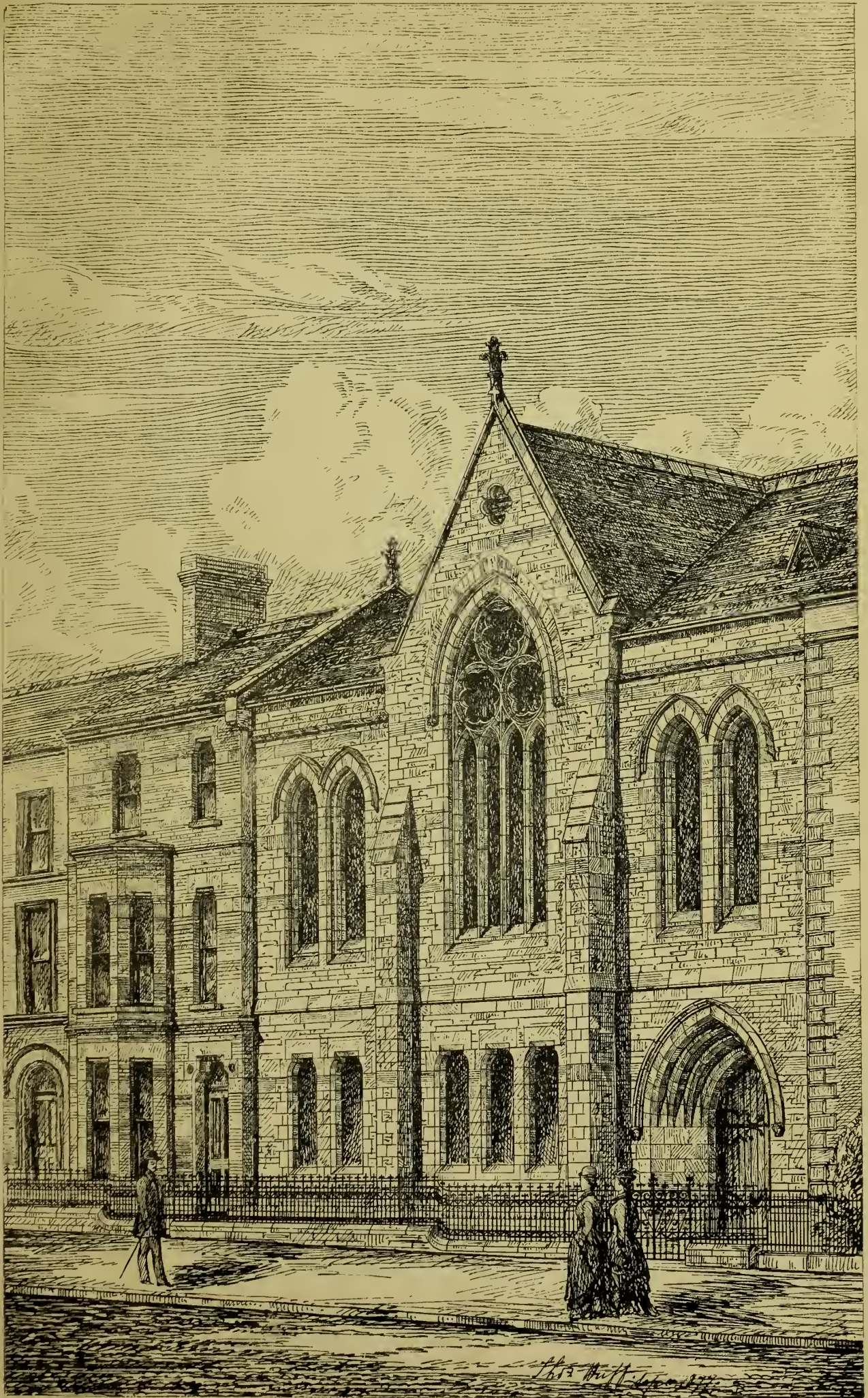
the instalment thus arrived at. It will be seen that, by this mode of calculation, the member pays  $4\frac{1}{2}$  per cent. for his money, as if he had the use of it for the whole term without any repayment, and, although he commences to repay a portion of the advance at the first monthly subscription meeting, he gets no allowance of interest for doing so. This practice is one which largely prevails amongst societies, and cannot be characterised as other than a gross misrepresentation. Others, knowing the temptation of a 5 per cent. rate, and the fair appearance it presents, charge 5 per cent. upon the annual balance, with a small premium, which may be added to and paid with the monthly subscription, but forget to say that the rate is thus increased to  $7\frac{1}{2}$  or  $7\frac{3}{4}$  per cent. We think every society should be bound to state clearly what their rate of interest is, having, in such statement, regard to the monthly or other periodical repayment, and if the borrower then chooses to borrow at a high rate, no objection can be taken to his doing so; but to conceal, and not only do so, but to lead a member to expect that he is borrowing the money at a low rate, when, in fact, he is borrowing at a high rate, is unfair and unjust, and the stratagem resorted to is a tacit acknowledgment that if the borrower knew the real rate he would not borrow, and that it is necessary to resort thereto to secure him. This misrepresentation, on the occasion of the establishment of the Leeds society, was felt to be a great injustice, and it was determined it should be (and it was, so far as that society was concerned) entirely avoided, the rate of interest charged being clearly and correctly stated.

**REDEMPTIONS.**—Another injustice affecting the borrowers was the terms upon which redemptions were allowed to take place. It is frequently the practice, whilst making advances at a high rate of interest, to allow redemptions only to take place at a low rate, such rate being generally left to the discretion of the directors. Now, it will be admitted that in societies generally it is impossible for a borrower to ascertain, at any time, in what position he stands, whilst, if he is compelled to redeem, he is totally at a loss to find out what he will have to pay, and he frequently finds that he is called upon to pay a much larger sum than he expected. This injustice was also removed, the tables attached to the rules enabling a borrowing member to see how his indebtedness to the society was month by month decreasing; to ascertain which he had, as in the case of an investor, only to refer to his subscription-book, find how much he had paid per share, and opposite that amount was the balance of capital unpaid. He was also allowed to redeem, by paying the balance thus shown to be due, without any fee, commission, or other charges, on giving fourteen days' notice.

**FINES.**—Another important alteration made was with reference to fines. These were felt to be exorbitant, and were materially reduced, and a new element was introduced as regards investors. It is well known that in many societies the common practice is to allow fines to increase until they accumulate to a sufficient sum to absorb all that an investing member has paid, unless he withdraws his money to save its being so swallowed up. The money when thus withdrawn would probably be spent, and not only so, but the discouraged investor would require a new incentive again to commence saving when placed in more prosperous circumstances. This evil was remedied by restricting the maximum amount of fines to 2s. 6d. per share; and when they had reached that sum, if the subscriptions were not continued, the amount due to the investing member was transferred, less 2s. 6d. per share for fines, to the deposit account, where it might remain as long as the member wished, carrying interest at 4 per cent. With regard to borrowers, the same rate of fines was inflicted upon them for default in payment as was imposed upon investors, although it had been the practice, and is so still in some societies, to levy from the borrower very nearly double the amount

\* From "Building Societies: not as they Are, but as they Should Be." By Samuel E. Platt. London: Allen; Aylesbury, Poulton.





Presbyterian Memorial Secession Church Buildings,  
BOTANIC-AVENUE, BELFAST.



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of fine for his default that an investor is subject to.

These are some of the principal details that formed the fundamental basis of the Leeds society at the time of its establishment in 1848, and the same policy of liberality and justice has marked its onward career. Years ago it abolished the contribution to working expenses, and recently it has extended its terms for loans from 18½ to 18 and 26 years, at the same time introducing a rule allowing borrowing members to suspend their payment on account of principal if they found themselves unable to pay their regular subscriptions; merely requiring them to pay by monthly instalments the interest upon the balance of capital actually unpaid at the time of such suspension. The latter is a most important and valuable feature, as it gives the society elasticity, and enables it to meet the exigencies of the ever-changing circumstances of its members, and saves the society having large sums thrown on its hands by redemptions. Such a feature, however, cannot be applied to societies whose rate of interest is so far above that charged upon a private mortgage, because as soon as a member wishes to avail himself of such suspension the interest has to be severed from the amount paid in reduction of the principal, and it at once becomes apparent what the rate of interest really is; and if he finds that he can obtain the money on a private mortgage at a less rate, he will redeem, pay the expense of releasing his property from the building society, also the expense of a mortgage to a private individual, and will then find himself better off than if he were to continue to pay such high rate of interest. When, however, the rate of interest is so low as 4½ per cent., or even 5 per cent., he has no inducement to change, because the simple suspension of repayments would give him all the advantages of a private mortgage, without the expense; and the security being beyond doubt good, the society runs no risk of loss.

The question will no doubt be asked, How can a society advancing money at so low a rate of interest, where there is no margin between that paid to the investor and that charged to the borrower, be sounder and safer than those societies advancing at a higher rate, with a margin in the interest for losses and expenses? Our answer is, that the rate of interest determines largely the nature of the business the society must undertake in order to do a safe business. This is self-evident; because the rate of interest being only such as a borrower would pay on a private mortgage, no speculative or risky securities need be entertained, for persons having first-class securities, which at present are not offered to societies on account of their high rate of interest, are attracted to a society based on the principles we have laid down; and seeing how fairly they are treated, borrowers prefer availing themselves of its advantages, as they thereby obtain a fixity of term, and the advantage of paying off their loan by small payments without paying any additional rate of interest. In fact, such societies, where they have been established, have succeeded to a great extent in absorbing from all classes of the community a very considerable portion of securities which would otherwise have gone into private hands. We must also remark that, when the rate of interest is so much lower, the periodical repayments are necessarily much smaller, and the member's ability to keep up his payments is thereby proportionately increased. The temptation to redeem is also greatly diminished, for in no private market can he make better terms. Moreover, as every payment by the member improves the quality of his security, the safety of the society's assets are greatly enhanced. The advantages to the society are therefore twofold—it keeps the business it has made, and the risk of its losses is reduced to a minimum.

With regard to the expenses of management of these societies, we further remark that the whole of the business connected therewith is capable of such adjustment that

the labour and expense of management are reduced to the smallest possible amount, such expenses being so small that the sum derived from entrance fees on new shares, the profit made on deposits, and other slight contributory sources, is not only sufficient to pay the same, but a surplus is left therefrom for division among the members. This is apparent from the fact that the Leeds society, as we have before mentioned, has entirely abandoned its charge for management expenses; and other societies that have not done so, are able not only to return such contributions, but to do so with some addition made thereto. Thus we have three valuable and important causes contributing towards the soundness of these societies:—Firstly, a better class of security; 2ndly, a greater probability of the payments being continued until any possible risk has become entirely extinguished; and 3rdly, economical management.

The soundness and safety of the principles we have indicated have been demonstrated beyond all doubt in the experience of other societies which have followed the example of the Leeds society, their adoption of these principles having been attended with the like or, if possible, more successful results.

#### PRESBYTERIAN MEMORIAL SECESSION CHURCH BUILDINGS, BOTANIC AVENUE, BELFAST.

THESE buildings, which are now in course of erection, consist of a large school-room, sexton's apartments, &c., on the ground floor. The church, which accommodates 450 persons, is placed above these, and is approached by an ample staircase, to which access is gained through an entrance doorway with splayed jambs and boldly-moulded arch. The design generally is a simple and inexpensive one, and is sufficiently explained by our illustration. It is intended to fill in all the windows with cathedral glass of varied tints in lead lights. Ample provision is made for ventilation by louvred openings in the roof, to which ventilating tubes converge. The walls are built of rubble sandstone in random-coursed work; the dressings of doors and windows, and some bands of red stone, are tooled. The church is fitted with pews of pitch pine stained and varnished. The contractor employed is Mr. Martin Curry, who is carrying out the works from the designs and under the superintendence of the architects, Messrs. Young and Mackenzie, Belfast.

#### COMPETITIONS.

##### THE ARCHITECTURAL ASSOCIATION (LONDON).

At the first ordinary meeting of the session 1877-78, the president (Mr. B. A. Paice) delivered the opening address. Speaking on the subject of "Competitions," he said:—

Let me turn your thoughts to another matter, also of great interest to the younger members of the profession, viz., the subject of Competitions. It has been said that this is a subject for the institute to take up, and that it is not within the province of this association. Perhaps not, as a society, but although the association is an educating body, yet a very large proportion of its members are either acting as assistants, or are commencing practice for themselves, and it is from the young men just starting in life that the ranks of the great army of competitors are being largely recruited, for by this means, it is said, they hope to get a connection. With the senior members it is different, for they have already established practices, sufficiently large in most instances to fully occupy their time without embarking on the sea of an open competition. . . . I pur-

pose confining my few remarks to the broad question of the competition system. I am afraid you will give me the credit of being a radical, whereas I am a conservative of the darkest blue. I have already said that our present system of making or trying to make an architect of a young man by hindering him for a number of years before his capabilities have been tested is the bane of the architectural profession; and now, again, I am bold to assert that the system of open competitions, as managed (or rather I would say, *mismanaged*) at the present day is also a bane, not only to the profession, but also to the art of architecture. Let us for a few moments turn our attention to the arguments generally used in favour of the system. It is said by some to be a means whereby a talented young man may attain a position which want of influential friends would otherwise prevent his reaching. This sounds all right, but is such practically the case? Are not the promoters of these open competitions in the majority of cases unable to grasp the advantages of a well-considered plan over the disadvantages of another which a professional eye would at once detect? Then, again, with regard to the architectural design of the building: is it not the experience of most of us that vulgarity rather than refinement wins the day? Do not the glaringly-coloured perspectives, with a crowd of pedestrians and equestrians in coats and trousers of many colours hurrying to and fro, but, of course, shown in the act of admiring the building,—which at present exists only on paper,—do not these, I repeat, win the day, and not those of our talented young men, who finish their perspective drawings, it may be, in pen-and-ink, it may be in light Indian ink or sepia, or it may be in a refined and delicate use of water-colours? The best designs are not, as a rule, selected, and the talented young man is doomed to disappointment. And so disappointment succeeds disappointment, which must have a bad effect upon the mind of the young architect. Let him have patience, and he will be sought after without having to go through the throes of a competition. Let him be thoroughly in earnest in his work; let him make the most of his time during his term of pupilage; let him act for a few years as an assistant, and then let him take an engagement for three days a week, which will admit of his making and keeping appointments, and I believe that work will come sooner or later, and that he will be able to attain a position without joining in competitions, and he will feel a pride in his having attained to that position not through influential friends, although they are most valuable, but simply through his own earnestness, his patience, and his loving devotion to his art. Another argument in favour of the competition system is that for public works it is calculated to ensure an erection more perfect for its purpose than the ordinary course would be likely to do. I for one am not at all prepared to accept this argument, for I believe that an architect would take a much greater interest in his work if he felt that he was entrusted with a public building without competition, not only in consequence of the confidence which is placed in him, but also because he would remember that his reputation and future success were at a stake, and I am convinced he would do his best to merit his country's approval. Let his plans be submitted to a consulting architect, or to the council of the institute if thought necessary by the Government or other public body which employs him, and I doubt not but that the architect would gladly make such modifications in his design, based upon the suggestions of the referees, as would thoroughly satisfy his clients before the works were commenced. Again, I believe it is far better to work out a scheme calmly and quietly, and without hurry, rather than under the high-pressure system and bustle of a competition. So much for the arguments in favour of the system. And now let us glance at the arguments against the system of open competitions. The competitor embarks in ignorance,



not knowing fully the requirements of the promoter, his preference (if any) for style, or the building materials of the neighbourhood at his disposal, and their prices. The competitor may spend many long and tedious hours over the conception of some wonderful dream of the Queen Anne period, and when the designs are submitted, he learns that this is the only style which is distasteful to the promoter. Again, it is said by others that the system itself, unless based upon a somewhat Utopian ideal, necessitates a vast expenditure of time and trouble, not to say skill, by a number of persons, all of whom cannot possibly receive any adequate return. In support of this argument, let us take a by-no-means exaggerated example of the ordinary competition advertisements of the present day. "To Architects and Others." Designs are invited for such and such a building in such and such a town; and these are the conditions; the site being at the corner of a street, two elevations are required, plans of five floors, two sections, block plan of site showing drainage, &c., and a perspective view,—which, if the competitor chooses, he may take an extra day or two over by finishing it in pen-and-ink instead of colour. Premiums of £30, £20, and £10 respectively will be given for the three selected designs, which will become the property of the promoters, who do not bind themselves to employ the architect whose design may be considered best, but, in the event of their doing so, the premium will merge in the commission! Let us analyse what this bait of premiums really means. It means that at least thirty competitors would be beguiled, and that therefore twenty-seven of them would receive no remuneration whatever, the other three competitors receiving £60, or an average of £20 each. We may assume that each set of drawings, including working out the preliminary sketches, would take one man at least thirty days: consequently his remuneration would be 18s. 4d. per day. This, I think, clearly shows that even the successful competitors would be out of pocket. And yet this is by no means an uncommon example of the indignity so frequently offered to architects. Let us look at the same example in another light. We saw that eleven drawings were required, and that there were thirty competitors: consequently there were 330 drawings submitted. We will assume that these 330 drawings would take one man at least two years to complete. What would be his remuneration? Thirty pounds a year, without board and lodging! Now really, gentlemen, are you going to be so dishonest to yourselves as to assist in supporting such a system? Are you going on wasting your time, your talent, and your energies on drawings, however well thought out, however artistic they may be, which will eventually be consigned to the lumber-room? Are you going to cast your pearls before those who cannot appreciate them? No; I am sure all who hear me to-night will not put forth a hand to advance such a scandal to the profession, but will rather do all in their power to check it. It has been remarked that the fact that such a system is not a good one is recognised by its not being adopted or even suggested in any other profession. It has been tried and failed notably in those most allied to architecture, viz., sculpture and painting, and this notwithstanding the fact that the sketches or models of the painter or sculptor have an intrinsic value of their own, whereas those of the architect have practically none. I have endeavoured to prove to you, in commonplace and feeble language, but which I hope will be not the less convincing, that the present system of open competitions is bad for art, bad for the public, and bad for the architect. If, however, it is found in some cases that competition must be resorted to, it should be on the principle of submitting preliminary pencil sketches, and a selection of competitors made on the merits of such sketches to prepare a second set, to be finished drawings, each of whom should receive an honorarium towards defraying his

expenses. It is simply preposterous to expect a man to work for nothing, and it should be considered below professional dignity to enter upon a competition without such recognition of services rendered; and no competition whatever should be entered upon except under proper precautions and a guarantee for a fair adjudication.

## GREEK AND ROMAN ART—

THEIR CONNEXION WITH THE TEACHING OF THE CLASSICS.\*

### LECTURE II.

(Continued from page 239.)

To pass from these great Olympian powers to the lesser powers of the Greek religion and mythology, their name is almost legion. They bewilder almost as much as they enchant our imagination by their very multitudinousness. There is no power of nature itself, and there is no power of the human mind or heart, which is not personified in this way. For instance, there are the powers of wine, of all fertile, inspiriting products of the soil, which were personified in Bacchus and his numerous group of satyrs, fauns, maenads, bassarids, and all the rest. Bacchus was not one of the greater gods, but, in certain regions of Greece he was especially worshipped—for instance, in Arcadia. His worship again was associated with that of the mystic goddess Demeter at Eleusis, and, in another form, with the worship of Apollo at Delphi. In the decorative sculptures of the temple of Apollo at Delphi there were figures of Bacchus, and we have many Roman repetitions of the types of this god created by the later Attic school, of about 380 B.C.; the school represented by Praxiteles and Scopas. And Bacchanalian subjects are among those most commonly found in all minor forms of art, such as wall paintings, vase paintings, and especially the relief sculpture of that later Roman school. These powers of Bacchus and his train lead us on naturally to think of the other nature powers, the powers of rivers, for instance. The great division amongst rivers was this. A river that ran straight into the sea was, in all cases, thought of as a son of Poseidon; and the god of such and such a river, as Alpheus or Achelous, was always a male god, sometimes a compound of man and bull; the energy, the force and rush, the stream and power and roar of the river, were typified to the Greek mind under the likeness of a bull. The Greek imagination continually, as time went on, purified and humanised these hybrid or semi-monstrous conceptions, investing them at least with lineaments purely mortal. The rivers got to be represented simply, at last, by men of various character and type—that is, the large rivers; but all the small rivers and mountain streams which run into the large rivers are always women, female nymphs. Thus, you will find, in a group I shall discuss in another lecture, a god of the river, the Ilissus, and beside him a female nymph, representing the chief of those little springs which supply the Ilissus close to Athens.

Then, there are the winds. The wind figures are variously draped, according to the quarter from whence they come; thus Boreas is generally warmly draped, to show that he comes from the north, from climes where they require warm drapery. Then there are figures, male or female, for every spring, every grove, every mountain, every valley, every division under which the human mind can possibly think of the influences of nature.

And passing from personifications of nature to personifications of the human spirit, we find lineaments more or less appropriate invented for every spiritual and intellectual abstraction that it is possible to think of. The Muses are amongst those which first occur to us. Apollo is constantly associated with a choir of Muses, and each one of those nine has a definite character and type, which occur on innumerable preserved works of art. Other personifications are equally familiar, as, for instance, that of Victory. Victory is one of several personifications to which the Greeks nearly always give wings, as they did to other things which are fleeting and fugitive, which come suddenly, we know not why. Victory is such a thing, and therefore the type of Victory is nearly always winged. One of the illustrations on the wall is a special Victory, discovered in the new excavations, of which I have already spoken of, at Olympia. We have any number of Victories—more than one in the British Museum. Victory intervenes in every contest; when there is a race there is a Victory hovering near the winner; in war you see one hovering on the side of the combatant who is about to win. Nevertheless, we had not got until lately any great original statue of

Victory from the central Greek times. We had the Victory at Brescia, in Italy, which is extremely complete and beautiful, but it is a Roman bronze; and to possess even the best Roman bronze is not the same thing as to possess even the most shattered fragmentary piece of true Greek work of the finest time. There is also in Paris a mutilated colossal Victory of the richest Greek workmanship, found at Samothrace. Last year, at Olympia, the figure before you was unearthed. It was one of the dedicatory statues set up in celebration of a particular exploit. The figure is in the act of swooping down from a rock, and ought to be seen on a pedestal some 18 ft. high, the elevation at which it was originally placed. This statue belongs to the central time of Greek art, and, although not comparable for beauty with the most beautiful of the Elgin marbles, yet the manner in which the gesture and the winged motion is shown, the way in which the drapery is made to flow back from the figure like waves from the prow of an advancing ship, is of the utmost grace and spirit. Think of the winged Victory, then, as intervening in a thousand ways in a thousand contests; and thence may the mind pass on to other winged figures—to Love, which was not always represented in the way which is most familiar to us now. The first figures of Eros, or Love, are those of a youth nearly grown to manhood; it is only in later Greek art that this youth becomes a boy, and a winged boy, a sporting, tumbling, mythological figure, whom you see parodying in every kind of manner the occupations of graver people. You see him sometimes running off with all the insignia of the greater gods, imitating all human sports, and intervening in all human festivities. Again, with regard to Death, Sleep and Death are almost indistinguishable in Greek art; they are both of them winged youths, sad of aspect, and sometimes carrying a reversed torch; but only when the genius carries a sword are we sure that it is really Death. Probably that beautiful figure which many of you will have noticed in the British Museum, sculptured on a portion of a column recovered from the temple at Ephesus, a naked figure with great wings, having beside him Mercury or Hercules, may represent the god of death, but it is not a figure which occurs very often, or which we can recognise very distinctly. You must dismiss from your minds altogether the notion that in any true Greek times death was ever represented as any thing ugly, bogey, or alarming. That conception of it came only later in the history of the ancient mind.

Then there are personifications of a thousand other simple and obvious abstractions of the mind. For instance, Peace and Plenty—Plenty as the offspring of Peace—one of the famous ancient statues of which the best copies have come down to us is a statue of Peace as a mother holding on her arm Plenty in the shape of a small child with a cornucopia.

Let us think, next, of what constitutes a wholly different class, the class of legendary human beings of heroes. Hercules and Theseus are two great and familiar examples, typifying all the beneficent operations of early history, typifying the early purging and purification of the world from noxious forces. Hercules was the stalwart, purifying hero who went about purging Greece of all robbers, evils and mischiefs. His figure is one of the most familiar and one of the most favourite of all. We have great statues, like the famous Farnese statue, which are probably copies from the great artists of the fourth century, such as Lysippus, who particularly delighted in this subject. In lesser works, and especially in vase paintings, you find the same hero, a thousand times represented, sometimes in a grotesque and sometimes in a serious form. Just as Hercules was made the popular hero of Universal Greece, so Theseus was more particularly the hero of Athens.

Lastly, passing from gods and personifications of all kinds of natural powers, and of moral and intellectual powers, and again from legendary conceptions to conceptions of real life, we find that even the works of art which we possess lay before us pictures from the whole range of Greek and Roman life, representations both of the public events of history and of private records of daily family life—of marriage festivities, and final scenes of parting and of death. It is impossible to establish any sharp division between what is imaginative and what is real in Greek art, because the Greeks seldom represented real scenes without putting in as actors in those real scenes some one or other of these legendary creatures. Thus, in a scene of marriage, or of wooing, the allegorical representation of love, either as Eros, or the other slightly varied embodiments of Love, Desire, or Yearning, will play a part. And thus the personified Victory is at hand to intervene in every contest. But here is an instance of history represented in the art; the intervention of preternatural beings as personifica-

\* Cantor Lecture. By Mr. Sidney Colvin, Slade Professor of Fine Art at Cambridge.



tions of the group shown in this diagram is one particularly memorable in Greek history. In 476 B.C., the people of Athens set up a new statue in honour of the two friends, Harmodius and Aristogiton, the two tyrannicides of Athens. Comparing with other dates the two figures represented in this diagram, we can restore with complete certainty these two figures into this group, and can tell that they represent that historical group set up by the people of Athens in a particular year after the Persian wars. That is the way in which they commemorated that great event, the deliverance of Athens in the earlier days, and the slaying of the tyrants by Harmodius and Aristogiton.

Then, apart altogether from the commemoration of special events, there is the vast class of portrait figures and busts. Portrait statuary was a thing not quite natural to Greek art at its beginnings. There are copies of portraits and recorded portraits of Greeks, as, for instance, of Pericles, Sophocles, Euripides, but in that great time portraiture was always in some degree ideal. It is only later, in the time of Alexander and Lysippus, that realistic portraiture comes in. Perhaps the earliest example we have is one in the British Museum, which is probably the portrait of the Carian prince Mausolus.

Going on from portraits, we have representations of religious ceremonies, and sacrifices, and representations of daily life, of hunting, husbandry, and marriage festivities, almost without end, but chiefly in the latter works of Greek art; a beautiful class of which numerous examples have been lately discovered—representations of death. At Athens, go along an excavated street, and either side of the street is lined with sculptures in relief of which the diagram upon the wall represents an example. All of these are funeral monuments, and in most cases they bear the name of the person in whose honour they are set up. In almost all cases death is represented in the quietest, most reserved, and tranquil, natural way possible, by some scene of ordinary farewell. For instance, a man takes leave of his dog, which jumps up and fawns upon him as he goes away; or a lady sits in her chair, and her servants bring her some ribbon and veil, which she would put on to go out for a walk. That is the subject in this case. You may always know a servant by this particular coif. This example is from almost the best time of Greek art, and is a singularly beautiful thing in the original. The lady, whose name is inscribed as Hegeso, the daughter of Proxenos, sits on a chair, and the servant stands before her with a box; a ribbon, or the like, she is taking out of the dressing-case is not shown, because it was painted upon the surface, and it is gone. Elsewhere, a mother pats a child under the chin, or lays her arm on the hand of another woman who comes to her, gestures of parting always expressed with the most perfect reserve and delicacy, good-byes of every day that symbolised to the Greek mind the last solemn good-bye of all. These gestures have been otherwise interpreted, and some will tell you that the scenes represent what certainly is represented in Etruscan art—scenes of the dead—that these are not partings of mortal people, but re-unions of people in the under world; that they are scenes representing people meeting in the Elysian fields. But a really close comparison will show that, of the greater number of Attic remains, that is not true. The more we investigate, the more we find that the mystical interpretation of works of that kind, associating them with things occurring in the Elysian fields, will not hold good, but that they belong to the clear, tranquil Athenian genius satisfied with the things of this world, or, at any rate, not willing to disturb itself with inquiring beyond, and representing the last bitter parting in this delicate, subdued way. No two of these monuments are ever quite alike. There is infinite refinement in all of them that belong to the good time, and most of them seem obviously and visibly in various ways to deal with that one idea.

And so our survey closes. It has necessarily been so rapid that it cannot have given us more than a very crude, and I am afraid muddled notion of the art of Greece, or of what was the multitude and significance of those images which either bodied forth lovely imagined existences or perpetuated deeds of historic fame, or commemorated the circumstances of familiar life. Such as our survey has been, it closes not unfitly with this last picture, which represents the preparation of the Greek lady for her last departure, showing with what gentle and collected thoughts the ancient Greek was ready to leave the world which was so full of glory to him, and bid farewell to that life which he spent in the worship, and almost in the companionship of his gods—of those glad and strong and divine existences, himself only one degree less divine, glad, and strong than they.

(To be continued.)

## THE TREES IN SACKVILLE-STREET.

WANTED A CIVIC GARDENER.

OUR heading conveys the meaning of existing trees, but, perhaps, we would not be far wrong if we attempted a parody on one of Moore's popular melodies, and wrote—"The trees that once in Sackville-street." Some days ago the Corporation received a communication from Mr. Nevin, of the Garden Farm Nurseries, Drumcondra, containing suggestions for the re-planting of Sackville-street, and offering to prepare for transplanting, and present gratuitously to the city, the necessary quantity of the several descriptions of ornamental trees he recommends. The City Engineer was requested to prepare for submission to the Municipal Council some changes in the present arrangement of the existing trees, and the best thanks of the Committee No. 1 were voted to Mr. Nevin for his generous offer and public spirit. As we indicated several months ago, we are coming gradually and by slides to the appointment of a city gardener. When the proposition comes before the council, and when the courageous member entrusted with the motion is about to rise, won't there be a flutter on the Hill? On that occasion, we have no doubt, as on other occasions when new appointments and an increase of salaries are about being made, there will be a "full house." There are two methods of creating a civic gardener; either by an appointment pure and simple by making him a member of the municipal staff, and building him a tool-house for his barrows, spades, shovels, rakes, and syringes; or voting a specified sum to an outsider for looking after the trees in a similar manner to that of the glazier, who is paid by contract yearly for keeping the windows of the parish church in repair, or that other individual who receives a yearly sum for "winding up" the town clock.

## OUR DRAINS.\*

THE SONG OF AN IRISH DISPENSARY DOCTOR.

Our drains! our drains! our foul, leaking drains!  
They poison the air of our streets and our lanes,  
In city and suburb, in hamlet and town,  
'Neath dwellings and workshops wherever laid down.  
Can reason still fail young and old to convince  
That sewer-gas slaughters both peasant and prince?  
How can we have health if the blood in our veins  
Is poisoned by breathing foul air from the drains?

Our drains! our drains! our badly-made drains!  
That give out their smells ere and after it rains,  
Sickening the robust man walking the flags,  
Prostrating the half-nourished worker in rags;  
Swift-stealing through panels where fashion and rank  
Sit proudly on cushions in drives from the Bank.  
But headache and faintness, and death-boding pains  
Go home in the carriage to tell of the drains.

Our drains! our drains! our death-dealing drains!  
Choked up, with no outlet for rotten remains;  
Chronic hot-beds of typhoid, full of foul silt,  
Reflecting our ignorance, proving our guilt,  
And showing that we have been riding rough-shod  
O'er Nature, and morals, and maxims of God.  
For pure air and water, in cities and plains,  
Spell health, if we keep right our dwellings and drains.

## THE LONDON BUILDING DISPUTE.

THE strike of the London masons still continues, the works of the New Law Courts being the principal point of interest. Foreign masons are still being imported in numbers to fill up the places of the masons on strike. The foreign workmen are mostly Germans, but many of them secede shortly after they arrive, join issue with the London masons, and return to their own country, their expense back being paid by the masons' society. The quarrel is an unfortunate one, and has its two sides, and it would not be difficult to point out mistakes upon the masters' side as well as upon that of the men. The contractors of the New Law Courts have a heavy and long job on hands, and it may be supposed that they are as well able to pay ten pence an hour to efficient London masons as several other master builders in the London metropolis. It is stated that they are paying the ten pence to some workmen, but that a system of classification is carried out, and that they insist upon paying men

according to their skill, some receiving as low as seven pence, and ranging on to the higher figure. It is the foreign workmen and not the English who are receiving the lower pay. Some of the master builders of London have taken sides with the contractor of the New Law Courts, and have also enlisted the services of continental and American masons. The strike after all is only a partial one, for several of the London masters are paying the ten pence per hour. The dispute, if protracted much longer, cannot result otherwise than in a serious loss to masters and men, and we would not be surprised to hear shortly of some changes taking place on the head of the contract work of Law Courts. The tender of Messrs. Bull, contractors for that work, was as much as £300,000 below that of another contractor, Mr. Lovatt. If men can outbid each other to such an enormous extent, there must be something very rotten and dishonest on either side, and the question of tendering becomes a farce. A look at the list of tenders weekly published in professional journals reveals the fact that the lowest tender in many cases is half that of the highest.

The contractors of the New Law Courts and other London builders have expended considerable sums of money in importing foreign workmen, and a large amount of this money has been thrown away, for a considerable number of the imported workmen have returned back to their homes, and it is not unreasonable to suppose that a great many of the foreign workmen, who are content to work in London at the wages they are paid, are not efficient hands. We fear that a great mistake has been made by the masters who have imported foreign workmen, for the injury will not be one-sided, and will not alone punish the London masons, but will eventually lead to cutting the ground from under the feet of the masters themselves. Foreign competition, if it pushes ahead in future, will be double edged; it will wound the masters perhaps more keenly and deeply than the workmen. Again and again we repeat that strikes and lock-outs are clumsy weapons, and should never be resorted to while any other resources for settling differences was available. An employer has a perfect right to be sure of obtaining labour at the cheapest rate, if it is efficient labour, and the workman is justified in selling his labour in the highest market. Conference or arbitration should, however, be resorted to for arriving at a settlement, for it is a folly to think that any interest in these times stands alone. One class are dependant upon another, and an antagonism between employers and workmen injures more or less the interests of the whole community.

## THE TELEPHONE.

A LECTURE was delivered at the Society of Arts, on Wednesday night, on this instrument, by Mr. Graham Bell. Having traced the history of the instrument and the progress of electric telephony, the lecturer explained by diagrams the action of what are called the "intermittent," the "pulsatory," and the "continuous" currents of electricity. He claimed the credit of being the first to apply the latter current, all previous descriptions of telephones having been on the "intermittent" or "pulsatory" plan. Not alone, by his method, could the tone and pitch of the voice be transmitted, but the very "timbre" of the voice itself; the sound travelled not with mechanical, but electric speed, he himself, sitting in a room in Boston, having conversed with a gentleman 280 miles distant with the same ease as if they were occupying the same apartment. There were arranged on the table in the lecture-room two telephones, one in connection with a house on the opposite side of the street, and the other with a house in Gough-square, Fleet-street. Several experiments were tried by the lecturer and some of the audience, the result in each case being satisfactory, the reply coming from the other end almost instantly, and with the utmost clearness.

\* From the Medical Press.



## BOOKS RECEIVED.

*The Journal of the Royal Historical and Archaeological Association of Ireland.*  
Dublin: University Press.

The part before us contains a report of the proceedings of the association at its April meeting, and of which we printed an abstract in our number for the 15th of that month. We have also an account of a monument of one of the chiefs of the O'Mores of Leix, by Mr. Thomas O'Gorman, together with an engraving of the top slab of the tomb.

Mr. Hogan made some observations on the singular ruin at Clonmacnois called Tempul Finghin, or Tempul Finnian. They may be of some interest to our readers:—

The peculiarity of this old building is that a round tower forms part of a structure evidently erected for Christian worship, whence it is argued that the round towers are of Christian origin. Dr. Petrie writes:—"The round tower which is attached to this church forms an integral and undoubtedly a contemporaneous part of the structure." Now, notwithstanding this high authority, an examination of the building will at once convince an inquirer that the church and round tower belong to distinct periods, the tower, as a matter of necessity, having been in existence before the church had been erected. The evidences by which this conclusion is arrived at are as follows:—First, at the place where the roof of the chancel came in contact with the north side of the tower, the masonry of the latter has been battered away to allow the roof to be inserted within it. There is no water-table, nor are the stones dressed to receive the roof; clearly showing that at the time the tower was erected there was no idea entertained by the builders of a roof coming in contact with it. Secondly, on the north side of the tower there is a window opening or aperture that could serve no conceivable purpose of either egress, light, or vision, if the roof of the chancel was to come in contact with it. The roof did come in contact with it, therefore it will follow that the builders of the tower in forming this aperture did not intend to have it concealed by a roof; but, thirdly, and principally, at the junction of the south wall of the chancel with the tower there is no bonding in the masonry, the wall of the tower is cut down into a mortise, and the wall of the chancel is inserted within it as a tenon, and where the eave course of the chancel wall joins the tower only a portion of the stone in the latter is cut away, as the wall of the chancel was to be inserted only so high—all of which prove that the tower of Tempul Finghin, like the other round towers of Ireland, originally stood isolated from any building, and that its union with St. Finnian's Church is of a later period than that of its own foundation. From the skill with which this wall of the chancel is "jointed" into the tower, one would infer that the intention of the builder was to convince future investigators that the foundation of both was coeval; and if such had been his design, it must be granted that it has been generally successful to the present date. In making this statement he begged to say that his convictions as to the date of the round towers had nothing to do with the conclusion he had arrived at, as he had no faith in the pre-Christian origin of the towers, and he thought he could say for the Rev. Mr. Neary that his views on this point coincided with his own.

The Rev. Mr. Graves said that the late Mr. Brash, in his "Ecclesiastical Architecture of Ireland," published some years ago, had come to the same conclusion, relative to the respective dates of the church and tower, as that arrived at by Mr. Hogan. Temple Finghin belonged to the twelfth century, and was built about the period 1130 or 1150. The architecture was the same as the Nuns' Church at Clonmacnois, the date of which was known to be of that period. The small hanging irons intended for external shutters remained to the present in the windows of the tower, which, on account of the destructibility of iron exposed to our damp atmosphere, would not be the case if the tower was much older than the church. When the debris was removed from the base of the tower, and the lower part of the northern wall of the church uncovered, under his (Mr. Graves's) inspection, some years ago, not only was a portion of the jambs of an Irish Romanesque doorway discovered at the western end of the wall, but its masonry and even its courses were seen to correspond with, and to be bonded into, the base of

the tower, having all the appearance of being one work. Then it should be remembered that we had here an example of a tower with the doorway on the level of the ground, opening into the interior of the church. If the tower was built originally to stand separately this would not have been the case; and this door has all the appearance of being a part of the original work. The only two known examples of isolated round towers, with the doorway on the level of the ground, were those of Scattery Island, in the Shannon, and Aghaviller, County Kilkenny. In the case of Aghaviller, the lower opening was plainly an after insertion, and the original elevated doorway was closed up; but, in the case of St. Finghin's tower, there was no trace of an elevated doorway. The rude roof-course, apparently cut out of the side of the tower after it was built, was certainly very like an adaptation, but the church was probably thatched, and so an elaborately-built roof-course was not required.

*Eason's Almanac and Handbook for Ireland for 1878.* Dublin: W. H. Smith and Son.

In this, the fifth annual issue, the compiler has still further shown his capability for the production of an almanac and handbook. He has added some exceedingly valuable matter and carefully-compiled tables. Under the head of "The Legislation for Ireland" (pp. 73-95) we have from the pen of Dr. W. N. Handcock an able contribution on the results of recent legislation so far as Irish interests are concerned. The following are passed under review:—The County Officers and Courts Act; the Irish Judicature; Prisons; Public Works Loans; Public Libraries; St. Stephen's-green. Next we have "Suggested Plans for promoting assimilation of the Laws of the United Kingdom," which are worthy of consideration. The paper on "The Chemistry of Bog Reclamation" is one which we took great pleasure in reading, more particularly its wind-up paragraph:—

"We cannot conclude without again adverting to the importance of this subject, and affirming with the utmost emphasis, that the true Irish patriot is not the political orator, but he who by practical efforts, either as capitalist, labourer, or teacher, promotes the reclamation of the soil of Ireland, or otherwise develops the sadly neglected natural resources of the country."

The insertion, in the issue before us, of the "Form of Preface to the Revised Prayer Book" of the Church of Ireland, is, we think, a great mistake. The space occupied by it might have been utilised to better advantage. We may be wrong; Mr. Eason knows best what to supply for the information of some of his readers.

The book is well printed, and cheap at a shilling. It will, doubtless, command a large sale.

## ADVERSARIA HIBERNICA,

## LITERARY AND TECHNICAL.

From the early days of Swift in Ireland down to the first twenty years of the present century, the history of banking and bankers in Ireland would be an interesting volume or two. Some of our early bankers were great usurers, and indeed some of them great misers, and many anecdotes have been told of them.

The transactions of the famous usurer Demar or Damer, for his name has been written both ways, furnished a theme for the satire of Swift and others, and down to our own day the traditions of his wealth has carried with it sayings that live in the mouths of our people, finding expression in these words:—"Had I Demar's estate"; "Were I as rich as Demar." Two noted bankers lived in Swift's time, named Burton and Fade. The memory of the former still lives, and some of our old citizens, a generation or two ago, were wont to express the value of a certain article or tender by saying "Tis as good as Ben Burton." This latter saying appears to have been transferred to the founder of La Touche's Bank, for the noted banker and his successors in name in Castle-street were much respected and highly valued by our old citizens and merchants for their probity, worth, and fair dealing. So

secure in position were the La Touches, and so strong the faith of the public in the soundness of the banking transactions, that any note of theirs or demand upon their house was unquestioned, being considered as good as gold. Hence the saying that lives in connection with this old banking firm "As good as La Touche." The rise and history of the house of La Touche is a deeply interesting one. An interesting chapter or two might be written also respecting the rise, career, and decline of Newcomen's Bank, which once existed and flourished for a while in Castle-street, opposite the house of La Touche. Sir William Gleadowe Newcomen was a somewhat noted personage in his time, and his country seat and grounds at Killester were once much spoken of and admired, for Newcomen was accounted a great improver.

Among other old bankers towards the close of the last century, some of whom continued business into the present, were—Finlay, of Ormond-quay, afterwards, we believe, in Jervis-street; Dawson Coates, Thomas-street; J. C. Beresford, associated with whom were Sir Thomas Lighton, Woodmason, and Needham. Beresford's bank existed in Beresford-place, opposite the Custom House. The name of the famous Daniel O'Connell was associated for some time with that of a bank. Indeed it is in the memory of several of our not very aged citizens that "O'Connell's Bank" were words that sounded very loud in Dublin once, but it was a subject of "great expectations" which were fated never to be realised.

Swift has left us, among his numerous poetic essays, "An Elegy" on the much-lamented death of Mr. Demar, the famous rich usurer, who died on the 6th July, 1720. These lines possess an interest in connection with our notes:—

"Know all men by these presents, Death, the tamer,  
By mortgage hath secured the corpse of Demar;  
Nor can four hundred thousand sterling pound  
Redeem him from his prison under ground.  
His heirs might well, of all his wealth's possessors,  
Bestow to bury him in an iron chest.  
Phut, the god of wealth, will joy to know  
His faithful steward in the shades below.  
He walked the streets, and wore a threadbare cloak;  
He dined and supped at charge of other folk;  
And by his looks, had he held at his palms,  
He might be thought an object fit for alms.  
So, to the poor, if he refused the pelf,  
He used them full as kindly as himself.  
Where'er he went, he never saw his betters—  
Lords, knights, and squires were all his humble debtors;  
And under hand and seal the Irish nation  
Were forced to own to him their obligation.  
He that could once half the kingdom bought  
In half a minute, is not worth a groat!  
His coffers from the coffin could not save,  
Nor all his interest keep him from the grave.  
A golden monument would not be right,  
Because we wish the earth upon him light.  
Oh, "London Tavern," thou hast lost a friend,  
Tho' in thy walls he ne'er did farthing spend!  
He touched the pence when others touched the pot—  
The hand that signed the mortgage paid the shot!  
Old as he was, no vulgar known disease  
On him could ever boast a pow'r to seize,  
But as his gold he weighed, grim Death in spite  
Cast in his dard, which made three moldores light;  
And, as he saw his darling money fail,  
Blew his last breath to sink the lighter scale!  
He, who so long was current, 'twould be strange  
If he should now be cried down since his change!  
The sexton shall green sods on these bestow—  
Alas, the sexton is thy banker now!  
A dismal banker must that banker be  
Who gives no bills but of mortality!"

The once famous "London Tavern" in Dublin where Demar kept his office doubtless witnessed strange conversations, meetings, and scenes; but no raucous pen of that day has left us his "Recollections of Demar," and the thousand-and-one scenes that were witnessed or were known to have taken place in the old city tavern. The sequel of some of Demar's mortgage transactions was possibly seen in the operations of the Irish Encumbered Estates Act.

There is an allusion to Ben Burton and Fade, the early eighteenth-century Irish bankers, in one of Swift's poems on Wood, of whom we have given some account in a former note. Quoth Wood to the people of Ireland—

"You will be my thankers;  
I'll make you my bankers;  
As good as Ben Burton and Fade;  
For nothing shall pass  
But my pretty brass,  
And then you'll be all of a trade."

In 1720, Swift wrote a number of verses entitled "The Run upon Bankers," in which

\* "The Ecclesiastical Architecture of Ireland, to the Close of the Twelfth Century; accompanied by Interesting Historical and Antiquarian Notices of Numerous Ancient Remains of that Period." By the late Richard R. Brash, Architect, M.R.I.A., F.S.A. Scot. Small 4to, with illustrations. Dublin: Office of the IRISH BUILDER. London: Simpkin, Marshall, & Co.



the surroundings of the subject of banking and bankers is treated, for the purpose of affording a lesson to the people. The verses are too long for quotation here, but the following are the opening ones:—

"The bold encroaches on the deep  
Gain by degrees large tracts of land,  
Till Neptune, with one gen'ral sweep,  
Turns all again to barren strand.

The multitude's capricious pranks  
Are said to represent the seas,  
Which, breaking bankers and their banks,  
Resume their own whene'er they please.

Money, the life-blood of the nation,  
Corrupts and stagnates in the veins,  
Unless a proper circulation  
Its motion and its heat maintains.

Because 'tis lordly not to pay,  
Quakers and aldermen in state,  
Like peers, have levees ev'ry day  
Of duns attending at their gate.

We want our money on the nail!  
The banker's ruined if he pays.  
They seem to act an ancient tale:  
The birds are met to strip the jays!

Riches, the wisest monarch sings,  
Make pinions for themselves to fly;  
They fly like bats on parchment wings,  
And geese their silver plumes supply.

No money left for squandering heirs;  
Bills turn their lenders into debtors;  
The wish of Nero now is theirs,  
That they had never known their letters."

When the last trumpet is sounded, and when the last grand account comes to be settled, Swift pictures and concludes the case of the wretched banker thus:—

"For in that universal call  
Few bankers will to heaven be mounters:  
They'll cry, Ye shops, upon us fall!  
Conceal and cover us, ye counters!

When other hands thy scales shall hold,  
And they in men and angels' sight,  
Produced with all their bills and gold,  
Weighed in the balance and found light!"

Swift's satire apart, there is a good as well as a bad side to banking, and it would have been well for this country had a good system of banking been developed here, and its benefits extended to the farming interest as well as to trade interests. In Bishop Berkeley's "Querist," published early in the eighteenth century, some good hints were thrown out anent the establishment of a national bank, and the utility of banking. The principal portions of the "Querist" were republished in some back volumes of this journal, accompanied by notes suggested by the Bishop's many excellent queries.

A Building Act is being promoted by the Metropolitan Board of Works, London, which in all likelihood will pass in next session of Parliament. The Local Government Board is also moving in the same direction. We hope that the Metropolitan Board of Works bill will speedily pass into law, so that a stop may be put to the nefarious operations of speculative or "Jerry" builders, whose name is legion all over the three kingdoms. As in the case of the Artisans' and Labourers' Dwellings Act, the extension of which we advocated for this country, we also ask that the powers of the London Building Act may be applied here. The Metropolitan Board of Works Building Act, though it is susceptible of improvements, even in its present form it is a good act, and its passing into law would do a world of good for the British community in general, Ireland included. Not only have we vile building construction in workmanship, but we have it also in materials of every description used. Bad drainage, or make-believe drainage, bad foundations, bad bricks, bad stones, and, let us add, bad workmen are the order of the day. The workmen, it must be admitted, in all cases are not bad in a double sense. Handiwork and morality are two different things. A skilful craftsman may be obliged to work for a dishonest builder, whose object is to "scamp" his job or contract, and personally or through his foreman he will not allow his workmen to spend proper time in the execution of their work nor even give them proper materials. We have honest builders in our midst who

do respectable work, but we fear that we have also not a few dishonest ones who have no characters to lose, never having possessed any for turning out creditable work at least. A cunning foreman may corrupt an honest builder, and lead to the corruption of a number of workmen. The employer may often in the end, as well as the outside public, be the sufferer. Money may be made for a short time, and big profits realised, but bad building work soon tells its own tale.

We will not open the different ramifications of the subject, for it would take a long article instead of a short note to discuss the question. It is sufficient to say for the present that the abuses connected with speculative building are various and wide-spread, and that a stringent Building Act cannot be passed too soon to meet the evils. Our local and other authorities in Dublin are these years back playing with the question of a Building Act, and it is time that the question should be taken out of their hands. Let some Irish member of Parliament, therefore, move next session (if Mr. Slater-Booth again brings forward his Public Health Metropolis Bill) that the provisions of that act be extended to this city. The withdrawn bill of the last session will doubtless contain some good amendments in relation to building matters, which will make some of our local authorities open their eyes wider. The provisions of either of the bills we have mentioned can be applied to Ireland, and the sooner it takes place the better it will be for the public in general, and the public and personal health in general and particular.

### THE GREAT RUSSIAN BATH, NEW YORK.

AT last New York is happy (says a correspondent of the *Armagh Guardian*), for we have a Russian bath, not the fraudulent imitations with which certain imposters have amused our cousins in the neighbouring country towns, but the real, genuine Simon-pure Russian bath, such as Peter the Great might have sweltered in, or the Grand Emperor Nicholas have honoured by his afternoon siesta. I am not aware that history gives us any positive and reliable information as to who was the first individual who enjoyed a Russian bath. The first bathing on an extended scale that I can call to mind at the present time was a gentleman named Noah something—his other name I forget—who got caught in a heavy shower once, and was so disgusted with water ever after that he took the earliest opportunity of testifying his contempt of it by getting tight as bricks as soon as he got on shore! The next individual that tried a Russian bath was one Pharaoh, who lived somewhere in the vicinity of the Pyramids! He went hunting for Jews with some of his friends, and only succeeded in getting a duck in the Red Sea, while Moses stood on the banks with his friends and made game of him as he went down. All decent nations have had their baths—we have ours. We may not yet be able to rival the baths of Adrian or Caracalla; perhaps we have nothing that will equal the Tepidarium of buried Pompeii. But this we have, beyond all question, the finest bath-house in the United States, if not on the continent of America. The opening of the establishment was one of the events of the week. For months past the busy note of preparation has been sounding, and our fashionable elite, to whom the Russian bath has become an absolute necessity, have been on the tip-toe of expectation. The opening took place on Tuesday, the 23rd, and no event of the season has created a greater sensation. All sorts of marvellous stories had got afloat of the luxurious appointments of the new establishment; and of the thousands who flocked to the opening on Tuesday, all were surprised and delighted. The press was largely represented by ministers and lawyers, belles of our fashionable society who resort to it to preserve their beauty, artists, authors, and men of leisure, and doctors innumerable, graced the new baths with their presence. The building, No. 18 Lafayette Place, is large, handsome and commodious, but once inside and the interior arrangements eclipse everything of the kind that has been seen on the continent before. All the rooms are magnificently furnished, and there are accommodations for sixty bathers at a time. Passing from the splendid and richly-furnished parlours you are ushered into the dressing apartment; having disrobed you are conveyed to a beautiful room of the

purest white marble, having several tiers of shelves or conches with white marble pillows, on which the Russian bather may repose; for the first grand motto of the establishment is "Take time," and the second is like unto it, "Don't be in a hurry." Around this apartment floats a light film of steam, and in the centre is a marble basin 12 ft. long and 8 ft. wide, filled with pure cold water. You stop here only a few minutes, and passing through another small apartment you are ushered into the grand marble hall known as the main bath. Here the steam is up to 120°, and when you first enter some poor sinners have been heard to say that it felt like a foretaste of the future. For a moment the heat is overpowering: the dense steam envelops you in a cloud, so that it is impossible to recognise a person a few feet away; here you stretch yourself out on a luxurious marble couch, and gradually sink into a state of beatitude only known to the blest. After dozing away about half an hour, you take a shower if you please, anything from a young Niagara to a gentle spray, and then you pass into the small apartment which lies between low and high temperature bathing rooms; here you are laid out on a marble slab and an attendant rapidly soaps you from your head to your heels, and taking a brush in his hand, something like a horse brush, he rubs you down till you begin to sympathise with the horse, to think that he has to undergo this punishment every morning. When that fellow gets through with you, you don't feel as if you would need scrubbing again for about ten years. You are showered and douched, and after taking a refreshing plunge in the marble basin, you pass out to the finishing apartment where a corps of Sybarites await you; you are laid upon a couch, and a merciless savage commences the finishing process by rubbing you from the crown of your head to the sole of your foot. Your body and limbs are polished till they resemble so much ivory, and when the attendant signifies that he has done, you feel—you feel—well, I don't know that I can exactly describe the sensation, but it must be very like the happy darkey that felt like a morning star. The rush has been tremendous ever since the opening day, and it would seem that, having struck a great popular need, the proprietors, Mad. A. Capes and Dr. C. T. Ryan, are now on the high road to fortune. When taking in the lions of the city don't forget the Russian bath!

### NOTES OF WORKS.

**BUSHMILLS PRESBYTERIAN CHURCH.**—Considerable improvements having been effected at this church, it was re-opened on the 10th ult. The cost was about £500.

**ST. MICHAEL'S CHURCH, LIMERICK.**—This church was re-opened on the 18th ult., after the completion of various improvements, decorative and otherwise, which it has been undergoing for some months past, from the designs and under the directions of Messrs. Fogerty and Son, architects, Henry-street, Limerick. The present works are supplemental to others which have been judiciously carried out since the appointment of the present vicar, the Rev. Benjamin Jacob. The height of the tower has been increased, and pinnacles added to it. In front of the building have been erected cut-stone piers, with ornamental railings, tiled entrance floor, &c.; these are the gift of Mr. Robert Hunt, J.P. A new chancel has been added at a cost of about £2,000. The chancel window belonged formerly to St. Mary's Cathedral, from which it was removed to make room for a memorial stained glass one. By the ingenuity of the architects the window was reduced in dimensions, and made suitable for the smaller church of St. Michael. The roof is of pitch pine varnished; the flooring is laid with encaustic tiles; the columns are of Cork red marble, with Portland caps and bases. The seats are of pitch pine, and have been painted by Mr. Cusack, of George-street, in very creditable style, and in tone harmonising admirably with their surroundings. Mr. James Bannatyne has presented a number of brass coronæ of ornate character, manufactured by the well-known firm of Jones and Willis, of Birmingham. A handsome lectern, by the same firm, is the gift of Mr. J. M. Smallman, as a memorial to his wife. A richly-carved oak pulpit and prayer-desk are the gift of Mr. Thomas Livingston.



**ST. PAUL'S CHURCH, GLENAGEARY.**—The incumbent of St. Paul's, Glenuageary, County Dublin, writes to say that the gift of a glebe-house has been munificently made by a family in the parish. The site—one acre—is readily granted in perpetuity, under the special Act of Parliament for that purpose, by the lords of the soil—not purchased but leased in perpetuity, and to the trustees of the church, for the use of the incumbent for the time being. Few churches and few parishes (he says) have been made recipients of such generous and pious gifts of three stained-glass memorial windows, completed school-house, peal of nine bells, and now the parsonage, as has this church and parish.

**NEW CHURCH FOR BANGOR, COUNTY DOWN.**—It has been decided to erect a new parish church in Bangor. Robert E. Ward, Esq., D.L., the lord of the soil, has given a plot of ground and a donation of £1,100, Lord Bangor has contributed £500, and there is on hand the sum of £430, the proceeds of aazaar held fifteen months ago for "the enlargement and improvement" of the existing building. The trustees of the "Marshal Beresford Fund" have promised liberal assistance. A preliminary meeting was held on the 7th, and a meeting of the select vestry on the 17th ult., when it was unanimously decided to erect a church capable of seating 600 people, at a cost of £6,000.

**SANTRY CHURCH, COUNTY DUBLIN.**—This church (founded by St. Pappan, and occupying the site of a religious edifice founded by him in the 11th century) will be re-opened on Sunday next. It has been newly floored and wainscotted, and painted and decorated in suitable style. A twelve-light corona in centre of nave with pillar lights in gallery, have been supplied by Messrs. Maguire and Son. The curious 13th century font, removed from the chancel about forty years ago, has been replaced in its original position, thus giving an air of antiquity to that part of the church which harmonises with the massive and elaborate old carving which surrounds it. This church, with its interesting monuments to the Lord Santry, the families of Domville, Jackson, Brereton, &c., now forms an object well worth the antiquary's visit. Mr. J. F. Fuller was the architect, and Messrs. Anderson, Ratoath, Co. Meath, the contractors.

#### BLACKROCK TOWNSHIP.

At a late meeting of the Commissioners the chairman said the members were aware that five of the Commissioners, including himself, had been surcharged to the amount of £1,339 odd on account of asphaltting. Captain Betham thought it advisable to appeal to the Local Government Board, and that the appeal should be drawn up by their solicitor; but he (the chairman) thought a plain statement of facts would be equally efficacious. Mr. Williamson had written a memorial and submitted it to counsel. It might be the case that any of the members would be similarly surcharged, and it was to all their interests to try and get any change in the laws which bear so hardly on all such boards.

The chairman read a letter he had written to the Local Government Board, explaining the action the Commissioners had been surcharged for. Mr. Worthington had previously executed some asphaltting in the township, and when there was more to be done (Mr. Worthington having the exclusive right of laying down the peculiar kind in Ireland), the board considered it would be useless to advertise, as no tender could be got; and in this case all possible care was taken to preserve the rights of the ratepayers.

Mr. Kelly considered the auditor was a pest. His reasons were that, on a former occasion, some of the board were surcharged, and they appealed to the Court of Queen's Bench, when the surcharge was disallowed. Costs to the amount of £200 were incurred, but the court could not order the individual costs. Subsequently they were paid by the board, and the auditor passed the payment, which came

out of the pockets of the ratepayers at the frolic of the auditor!

It was arranged that Mr. Wigham's letter should accompany that of the memorial to the Local Government Board.

#### ROADS AND STREETS.

**MESSRS. CROSBY LOCKWOOD AND CO.** have issued a new work, entitled "The Construction of Roads and Streets. In two Parts. I. The Art of Constructing Common Roads. II. Recent Practice in the Construction of Roads and Streets, including Stone, Wood, and Asphalte."

#### HOME AND FOREIGN NOTES.

**THE SIR JOHN GRAY MEMORIAL.**—The block of marble for the figure of Sir John Gray has arrived at Mr. Farrell's studio, Lower Gloucester-street. It weighs about twenty tons.

**SHOPKEEPERS BEWARE!**—At a meeting of No. 2 Committee of the Corporation, a letter from the Chief Commissioner of Police was read, notifying that instructions had been given to the police with a view to their taking effective measures in future for the punishment of persons found sweeping out sawdust, straw, and other refuse from shops and stalls.

**DANGEROUS STRUCTURES.**—In reference to the propped-up house, 40 Grafton-street, the case of the "Corporation v. Lawrence," Mr. Windlock, after hearing the evidence as to the obstruction, remarked that it had continued for nearly three years. He was sorry that he should enforce the law in the case, as the act of Parliament relating to the case was a penal statute. He should now inflict a fine of £5, and £1 per day for every day the obstruction was allowed to continue.

**ANOTHER OBSTRUCTION, AND THE LAW THEREON.**—Matthew Kenny, a beer-house keeper, residing in Great Britain-street, appeared to sustain a complaint against a victualler named Dunne. It appeared that defendant lived next door to complainant, who stated that his neighbour caused quantities of meat to be hung out in front of his shop, thereby interfering with his place of business. Mr. O'Donel said that on the Continent and in every civilised country the butchers' shops were kept clean, supplied with flowers, and had a window or handsome railing in front, instead, as might be seen on Ormond-quay, the meat hanging out often bleeding. Three persons went inside to purchase, and did not crowd on the footpath, as in this country. He was of opinion that these projections should not be permitted, but he would dismiss the summons; for if he did not do so, the defendant would go to the Court of Common Pleas, and that court, although the Courts of Queen's Bench and of Exchequer had decided that it was illegal to do as the defendant was alleged to have done, would reverse his decision. The case was ultimately, after some discussion, adjourned for the production of further evidence. Well, well! the law is in a beautiful state in this country, and so is the city—as clear as mud!

**A CENTENARIAN.**—Died at Ballyvaughan, on Friday, the 23rd ult., Elizabeth D'Obe, at the advanced age of 107 years. She was in the enjoyment of all her faculties up till her death, and in good health until three or four weeks before her decease, and able to take charge of the house in the absence of her daughter up to this period. When the French landed in Ireland in '93 she was married at Corofin, in the county of Clare, and had a good many of her children there; her maiden name was Pilkenton.

**A WORD FOR THE NORTH CITY.**—At a meeting of the North Dublin Union Guardians, Mr. M'Mahon said he wished to bring a matter before the board which was of the utmost importance to the ratepayers of the North Dublin Union. He understood that the Government intended purchasing a site for the holding of cattle shows, and expending on this matter between £30,000 and £40,000. It would, therefore, be of great benefit if the site selected was on the North side of the city. There were many sites on the north side, about Glasnevin and Drumcondra, that would be most suitable, and it was also to be kept in mind, when judging of the respective advantages of the two sides of the city, that four railways had their termini on the north side. He therefore moved:—"That, before selecting a site for the shows of the new Royal Agricultural Society of Ireland, his Grace the Lord Lieutenant be respectfully petitioned to have the various sites on the north side examined and reported on by the Commissioners of the Board of Works and such other bodies as they may think fit."

**STATUE OF KING ROBERT THE BRUCE.**—The statue of King Robert the Bruce, which was unveiled on Saturday last with befitting ceremonial on the Castle Esplanade at Stirling, is described as a magnificent work of art. The statue, which is 9 ft. high, and rests on a pedestal 10 ft. high and 6 ft. wide, represents the Bruce in the act of sheathing his sword on the achievement of the independence of Scotland. Into the pose of the figure the sculptor, Mr. Andrew Currie, has contrived to throw a certain manly dignity, and the severe outline of the chain armour is relieved by drapery in the form of a knightly robe thrown over the shoulder. The folds of the robe fall upon a shield bearing the Scottish arms, against which are placed the king's battle-axe and the crozier of St. Filan. The statue was cut out of a block of freestone weighing about five tons, and much care has evidently been bestowed on the accurate reproduction of all details.

**THE UNHEALTHINESS OF DUBLIN.**—The latest return of the Irish Registrar-General shows the health of the city of Dublin in even a worse light than any of its predecessors to which we have alluded. The death-rate for the week ending 17th November was 28.1 per 1,000 of the population. That of the closely-populated and badly-situated town of Glasgow was only 20.0, that of London 21.2, and that of Edinburgh, the city with which Dublin might justly be compared, was only 16.9, a difference of nearly 50 per cent., against Dublin. This excess represents an absolute derimation of the inhabitants, considering that there is no epidemic nor any unusual circumstance to justify such mortality, and bearing in mind that it is, in a greater or less degree, the constant condition of the city. Matters have at length reached such a condition that further loss of life cannot be permitted. The deeds of the Public Health Committee of the Corporation cry aloud for condign punishment.—*Medical Press.*

**MUNICIPAL MEMS.**—At a meeting of No. 1 Committee, on the recommendation of the Deputy-Surveyor it was decided to commence paving William-street with Welsh sets, as soon as the works in Nassau-street and Sir Roger's-quay are completed, which will probably be within a fortnight. A communication as to the sanitary condition of Summer-hill and the neighbouring streets was submitted, but it was pointed out that it is the duty of the police to take summary measures to prevent the principal cause of complaint—the casting out of offal and refuse on the surfaces of the streets and lanes. The City Engineer presented a report regarding some statements made that Limer asphalt had been laid on footways in lanes and obscure places. The report proved that these footways on which asphalt was laid had been carefully and judiciously selected, care being taken to give preference to those over which the traffic is greatest.

**A NOTE ABOUT THE LATE DEAN OF OSSORY.**—The late Dean Vignoles (says the *Athenaeum*) was the oldest survivor of the French-speaking Huguenot descendants of the Sieur de Prades, who, after the revocation of the Edict of Nantes, emigrated to this country. The dean's father was a major in the army; but afterwards took holy orders in the Irish branch of the then united Church of the Establishment. He was the last person who actually preached in the French language in the French church at Portarlington, in Queen's County, where several families of refugees had settled; and the late dean succeeded his father in the post in the year 1817, and was the last to read the liturgy in the same tongue. Dean Vignoles used to relate an anecdote of some interest referring to his vain attempt to recover the MS. of the charter granted to the ancient chapter of the cathedral. It had fallen into the hands of Swift, who had lent it to "Stella," and it was supposed to be in the possession of the Johnson family. It came to the dean's ears that there was to be a sale of the effects of that family's descendants in Dublin, and he, of course, immediately set out for the metropolis; but unfortunately reached the auction rooms just at the conclusion of the sale. He ascertained that a box of old papers and parchments had been bought by a solicitor; and hurrying to the purchaser's office he found that a large quantity of what appeared to be "library rubbish" had already been committed to the flames by the gentleman's clerk. The dean, in an agony of excitement, rushed to the inner office, where the holocaust had been piled, and to his horror saw the edge of what he felt sure was the missing MS. crackling on the fire. "I am not ashamed to say," were the dean's words, "that I sat down and wept!" Dean Vignoles was a cousin of the late Mr. C. B. Vignoles, C.E., F.R.S. He was a man of singular refinement and of most genial and attractive manners. He was in his 88th year at the time of his decease, which took place on the 18th October, at the Deanery, Kilkenny.



## MASTERS AND WORKMEN.\*

NEXT to the Patent-laws, the subject most interesting to the members of our society is that of the existing relations between masters and workmen—between capital and labour, as influenced by the action of trades' unions or otherwise. During the past year, a large number of communications have appeared in the public press on these subjects. I think we may congratulate ourselves that the spirit actuating the leaders of trades' unions is more reasonable and more intelligent than it was a few years since; not that the principles which guide their action are more liberal, or show a better knowledge of political economy in its relation to the production of manufactures than they have previously done, but that there is greater liberality and consideration for, and toleration of, the opinions of others displayed in their discussions, and a greater desire to meet and consider their grievances, and the best mode of alleviating them, than formerly. There is greater willingness to refer their disputes to able and disinterested men; and perhaps the greatest cause of anxiety at the present moment respecting their action and their influence upon the future of the manufacturing industry of the country, is to be found in the spirit of protection—of opposition to free trade—which is evidently making progress among their leaders, and which appears unfortunately to be reviving among a few of the more educated classes, calculated to do great injury, and which cannot fail to be most injurious to the manufacturing industry of the country.

This appears to me to be the necessary outcome of the restrictions working men are arbitrarily imposing on the hours of labour and upon the uniformity of the rate of wages to be paid for it, irrespective of the quantity or quality of the work done, and which they are endeavouring to enforce, both being based on the limitation of the supply of labour to benefit a minority at the expense of the majority, and upon the idea that Englishmen have reason to fear foreign competition.

On this subject I may safely quote the opinions formed by the artisans selected to go to the Paris Exhibition, to be found in a paper I read before the society in 1867, in which I state that "the men were selected with reference only to their fitness for the duty they undertook, and this was judged of by the recommendations they brought, either from their employers or fellow-workmen, and it is remarkable that men so chosen, some belonging to the most powerful trades unions, others taking an active part in political associations, and others priding themselves on their independence of any union or political association, should most of them breathe the same spirit in regard to the superior position of labour in this country as compared with that in France and foreign countries generally. There is no despondency on the minds of these men. They do not fear competition on fair and equal terms, or doubt the activity of the inventive genius of their country." They admit inferiority in certain branches of handicraft, but nearly all attribute this to the want of the opportunities foreigners enjoy of studying as youths and adults works of ancient and modern art.

Not one of the 80 who went to Paris advocate uniformity of wages—most approved piece-work—most admitted that the English workmen had to compete with cheaper labour, and nearly all agreed that the mere price paid was not the sole ground of comparison of the value of labour, which was to be found in a proper estimate being made of the quantity and quality of the work done.

Considerable interest was excited among working men when these reports were published, and I hope a reference to them will not be misplaced now, when many of our English workmen appear to be doing all they can to neutralise the advantages they enjoy,

and to place the slow and unskilful workman on a par with the most industrious and most skilful.

I hope our society will continue in the course it has so long pursued, of advocating in its fullest sense the right of every man to bring his labour and the produce of his labour to the best market, and that, whilst admitting the right of union among all classes for any purpose calculated to improve their position in life, it will point out that the limit of the beneficial action of unions is easily passed, and that, where the regulations for their government, and the rules they enforce on their members, restrict or increase the cost of production, they will become the stimulators of foreign competition and the enemies of their own interests. They will foster, not a wholesome competition which ought always to exist, and which benefits all countries alike, arising as it mostly does out of natural advantages of climate and soil, but one which, increasing the cost of home productions, gives the foreign manufacturer a margin of cost to enable him to teach his workmen, not subject to similar restrictions, to equal if not excel our own.

The trades unionist endeavouring to restrict production, by limiting the number of apprentices and the hours of labour, forgets that whilst doing this he stimulates the instruction of apprentices and rivals abroad, both as workmen and masters, whose competition they do not now see but will soon seriously feel, and which is silently undermining their prosperity.

## TO CORRESPONDENTS.

MUNICIPAL.—The changes that took place in the late elections are not worth commenting upon, and their effect will be nil. It is with City Improvements we have to do, and not with Civic Politics. We desire to see work done, long and shamefully neglected.

R.D.S.—It would be useless now to re-open the controversy. As to what may be done, it lies in the future, and is very problematical; but as for what could have been done and might have been done, had there existed a real desire for doing it, we over and over again pointed out before it was too late for attempting it.

AN ACTOR.—Yes; the matter will be treated of in due time.

TOLKA.—Your suggestion has been anticipated.

RECEIVED.—J. B. C.—Sanitas—A Citizen—O. P.—A Lady—R. M.—A Kingstown Ratepayer—M.D.—"An Old Book-seller"—G. R., &c.

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\* From address by William Hawes, F.G.S., delivered at first meeting of the Society of Arts on 21st ult.



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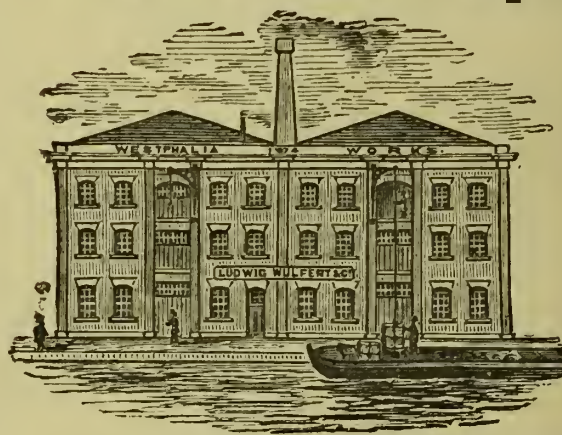
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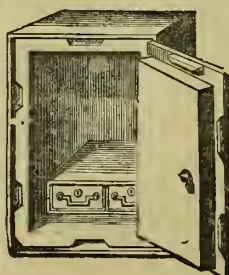
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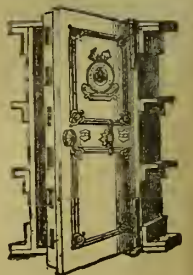
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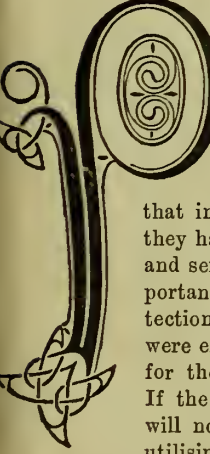
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## THE IRISH BUILDER.

Vol. XIX.—No. 432.

## SOME PAST AND PRESENT OBSTACLES TO PUBLIC IMPROVEMENTS.



ERHAPS the greatest impediments to public improvement and improvements of all kinds, are prejudice and vested, or supposed vested, interests. It is only right that inventors or patentees, when they have produced a really useful and sensible appliance of any important kind, should obtain protection for some time, until they were enabled to benefit themselves for their long study and labour. If the State or some other body will not afford them a reward by utilising their invention for the general good, inventors have a right to adopt the only means left open to them for benefiting themselves. As it is, and as it always has been, poor inventors have generally fared badly. They were obliged to part with their rights, which cost them years of anxious study, for a small reward, to wealthier individuals or firms, or perhaps they experienced an agony and disappointment too common of seeing their inventions pirated, modified, and put before the public in a slightly altered form in externals, while the principles remained unaltered.

Apart from patent rights as now acknowledged, we desire to look in a broad and general way on some obstacles, past and present, to public improvement. Scarcely a new mode of public conveyance for passengers or for merchandise for the last two centuries, or at least century and a-half, but was met by prejudice or opposed by a high-handed opposition. The system of canals and inland navigation had to encounter no small opposition on the part of several interested persons—landed proprietors, stage-coach owners, carmen, house proprietors, hotel or inn keepers, and local authorities such as existed at the period. The personal interest, not the public weal, was the one

thing that was uppermost. Everything that was ill was thought to be forensic because those interested in the old slow coach or post-chaise had their day-dreams disturbed.

The inland system of navigation, although valued lightly now, was a great undertaking and boon to thousands; and hundreds of those persons most opposed to it at its commencement were agreeably surprised a few years later. The canal system, as a general mode of conveyance, had not a very long reign until the uprise of steam power and its adaptation to railway purposes in England made those who felt interested in the exclusive use of canals feel very uneasy. The revolution, however, was not sudden, but the change advanced steadily and surely, despite of deep-rooted prejudices.

The amount of opposition that beset the first general introduction of railways worked by steam power was something extraordinary in its nature and extent. The dear old mail coach and the very dear old canal boat—which was termed a “fly boat,” though it did not fly without horse power—were looked upon as the best and swiftest of conveyances, and quite sufficient for all ends. The country grew agitated from sea to centre; landed proprietors would not permit their lands to be surveyed, much less cut up, for new-fangled notions; the earth was not to be turned upside down for the purpose of turning men's heads. “Will-o'-the-wisp” and “Jack the Lantern” were already in English fens and Irish bogs, and it was worse than “murder in Irish,” or even jaw-breaking Welch, to entertain the thought of a fire-engine puffing, snorting, and vomiting hot water, flame, smoke, and hot ashes, running rough-shod over the country.

A reign of terror commenced, and as many of the landed proprietors were members of Parliament, and some of them lords in the upper house, they added strength to the opposition arrayed against the introduction of the railway system. Some of the noble lords and members of Parliament quieted down a little; for they perceived there was a something to be gained by a temperate opposition as by an adhesion to the new scheme. Vested interests and the sacred rights of property were trampled far and wide, but withal the word “compensation” sounded sweetly, and the hope of a ready market for agricultural produce were not matters to be despised.

There were other advantages looming to be realised by the lords of the soil and the landed gentry, by the opening up of the country by railways. The noble lords and the landed proprietors took steps to secure their own interests; but, if their opposition grew less factious, the promoters of railways had still to contend against the clamour of a large number of other interested persons. The country hotel and inn-keepers were again on their feet, as their brethren had been in the canal era. The contractors for the supply of horses for her Majesty's mails and other stage coaches felt sorely aggrieved, and so did their workmen. Coachmen and carmen, private and public, thundered their curses. In fact a variety of trades or callings saw, or thought they saw, their personal interests imperilled, and were naturally annoyed.

There is no use in denying that in every great reform some individuals must suffer or experience losses; yet, withal, the greatest happiness for the greatest number should be

the chief consideration. Steam power in its application to railways and the sea-going vessels has conferred incalculable benefits on nations and communities. As late as 1836 the late Dr. Lardner, considered a great authority by several, stated in a lecture delivered by him then, that as for “making a voyage directly from New York to Liverpool, it was, he had no hesitation in saying, *perfectly chimerical*; and they might as well talk of making a voyage from New York or Liverpool to the moon.” Two years or under after this dogmatic assertion, the *Great Western* crossed the Atlantic direct. Whether a voyage will ever be made to the moon by steam or aerial power, we are unable to foretell. Not only have vessels crossed to New York, but have safely proceeded to Australia since Dr. Lardner's time. Prejudices have been overcome in several directions, but human nature is still human nature, and selfish interests still bar the way, and vested interests and the rights of property are still put forward when any desirable reform is contemplated or attempted.

The tramcar system is now becoming general, though we remember a few years ago when it was introduced into London by the somewhat erratic George Francis Train, it met with a violent opposition. A short line was laid down and worked, but prejudice was so strong, not only against the innovation, but against the American introducer, that the line was taken up again. The opposition to Train was unjust, senseless, and, we might add, un-English; but what will not ignorant parish bumbledom and vestryism sometimes do? Train was an instrument in paving the way, and though he was robbed of his merit, others soon afterwards—and some of the very parties who opposed—aided in the general promotion of tramways in London.

Another reform often impeded, but by degrees still pushing to the front, is the application of steam to locomotives to be employed on common roads. The general use of steam engines for the conveyance of passengers and goods on common well-made roads will ultimately take place. Its feasibility was shown half a century ago and upwards, and several times since in England, and even in this country some successful experiments took place. Steam carriages on common roads were worked several times in the neighbourhood of London, upwards of forty years since. A steam carriage which was worked experimentally and successfully in London several times, and which was run for hire on the common roads between the City, Moorgate and Paddington, was brought over to Dublin in 1835. Many of our old citizens, doubtless, remember the steam carriage called the “Erin,” it bore the name Era in London before its shipment. As soon as this carriage was landed it was put on the Howth-road, and ran through all the principal streets of Dublin. On one occasion it was run three times round St. Stephen's-green at the rate of eighteen miles an hour. After remaining about eight days in Dublin, it was re-shipped on board the Shannon and arrived safely at its old quarters at Stratford, outside London. A few years after this Mr. Jasper Wheeler Rogers spent considerable sums of money in striving to perfect a road locomotive. From his head quarters on the North Strand he ran his engine, tender, and carriage several times on the Malahide and Howth roads, and through the leading streets



of the city. Mr. Rogers's engine was a very heavy one, and with very broad wheels. It did not become a success, but the practicability of running steam engines on common roads was proved. There was no encouragement given in this country to enable Mr. Rogers or others to perfect their locomotives, and prejudices ran high. The time was not ripe for their general introduction.

The existence of turnpikes for long years both in England and this country was a great obstacle to improvements in various ways. The tolls were very heavy and the rates were in a manner prohibitory as against steam-driven carriages. On the Liverpool and Prescott road, it was given in evidence before a select committee of the House of Commons in 1831, that a steam carriage was charged £2 8s., while a loaded stage coach paid only 4s. On the Bathgate-road the same carriage would be charged £1 7s. 1d., whilst a coach drawn by four horses would pay 5s. On the Ashburton and Totness road the steam carriage would pay £2, whilst a coach drawn by four horses would pay 5s. Varying but still heavy tolls were imposed on other roads through the country. These charges were one of the great obstacles in the way of using steam carriages on common roads in former years, and of course the existence of turnpikes barred the way. Turnpike tolls not only interfered with the use of steam carriages on common roads, but retarded building improvements outside of cities and towns.

We find by a return of some private bills which passed the House of Commons in 1830-1 that the tolls on the Drogheda or northern roads in this country were 6d. for a stage coach per horse; 2d., 4d., 6d., 1s., for wagons, vans, &c., according to the breadth of their wheels. If propelled by machinery, carriages with three or a less number of wheels paid the same toll as if drawn by two horses. We find at the same date, on some roads in England, that carriages with four or more wheels paid the varying rates of 1s. 6d., 2s. 6d., 3s., and 4s. Preposterous charges like these worked vast injury to public improvement.

There can be no question that with the great stride that has been made of late years in the construction of steam engines, they could now be safely and profitably worked, not only in connection with tram carriages, but on common roads. There need be no fire or smoke observable, and the speed may be regulated to a pace that will be safe to maintain. The use of powerful breaks will stop the engine within a very short distance. Steam, of course, in the lapse of a few years may possibly be superseded in the working of various forms of machinery, but until the introduction of another safer and better motive power, we hold that steam ought to be applied to the working of tram-cars and locomotives on common county roads, as well as country roads, for roads outside the metropolis are never congested by traffic like the streets of a populous city. Despite of prejudices and interested opposition, obstructions to public improvement must give way in the near future, as it has in the past, and if public or local authorities do not move with the spirit of the age, they will be moved out of the way by a practically educated public opinion. There are several other obstructions that bar the way to urgent public improvements which we may touch upon hereafter.

## NOTES ON THE RISE AND PROGRESS OF PRINTING AND PUBLISHING IN IRELAND.

### TWELFTH PART.

WE would fain linger over Irish native literature and its associations, and Dublin printers, publishers, and booksellers, shortly previous to and during the era of the Irish Parliament, for there would be much that would be historically interesting to recount. Our task, however, is not to enter into exhaustive details, but to give, as we have already stated, a rapid review or sketch, stopping now and again to say a few words about particular books, their authors, publishers, or printers, whose lives and works suggest more than a mere passing allusion.

Among the booksellers of Dame-street in the last century of more than ordinary note was John Archer, afterwards Alderman Archer. We find him living in 1786, and previous, at 18 Crampton-court, but in a few years afterwards his shop was at 80 Dame-street. Archer did a good trade here for some years, and had numerous patrons. Mr. Gilbert, in his "History of Dublin," alludes to Archer, "whose shop was the rendezvous of the literary men during the last ten years of the eighteenth century." Several very creditable works were issued by Archer, and he appears to have issued a catalogue of books published in Ireland up to about 1770. Among the books published by Archer were "The Poetical Works of William Preston," 2 vols. 8vo (1793). He also published a tragedy of Preston's in the same year, entitled "Democratic Rage," which had a long and popular run at the Crow-street Theatre. An edition of Preston's poems had been issued about thirteen years previous to that of Archer's, by William Hallhead, a bookseller in Dame-street; but Archer's edition comprised several additional and miscellaneous poems not previously printed, as also several dramatic pieces, with the tragedies of "Offa," "Ethelbert," "Messene-freed," and "Rommunda, or the Daughter's Revenge." The tragedy of "Democratic Rage" is founded upon the fate of Louis the Sixteenth and the then state of French society.

Preston's poetical works, as issued by Archer, were printed on good paper with good type, and the work was embellished with vignettes well engraved by Esdell. Prefixed to the first volume is a portrait of the author, engraved by Brocas, a Dublin artist of note, from a painting by Robertson. A local print of the time, in noticing this edition of Preston's works, remarks of the author:—"It was always our opinion that our ingenious author courted Thalia with more success than any of the Muses, and from a careful perusal of this collection our sentiments are not changed. In many of these poems there is an originality, and in all a lively fancy and correct taste." There are some eulogistic verses in the August number of the *Anthologia Hibernica* of 1793, addressed "To William Preston, on his tragedy of 'Democratic Rage.'" Preston was a member of the Royal Irish Academy, and was popular and lionised for some time on account of his poetical and dramatic works.

In 1793, Reilly, of Aston's-quay, published an edition of the Douay Bible, folio, in numbers. The work was intended to be completed in fifty parts, to come out weekly, at 1s. 1d. each. A number of plates, painted by Stot-hard, and engraved by Bartolozzi and Schiavonetti, were promised. Some numbers of the work were published, but we believe the work as a whole was never completed. Another attempt at publishing the Douay Bible in parts was made early in the present century by Christie, but the publication was suspended. Of other works issued by Christie, we will speak hereafter. In 1794, William Folds, of 38 Great Strand-street, published the second volume of Hitchcock's "Historical View of the Irish Stage," the first volume having been printed in 1788 by

R. Marchbank, 11 Dame-street. Marchbank figures at the above period as a printer, bookseller, and stationer in Dame-street, and some years afterwards we find him at 10 Temple-lane, off Dame-street, as a "printer and patent medicine-seller." Hitchcock was for many years towards the end of the last century, and for some years in the present, connected with Crow-street Theatre, first as a prompter, and afterwards as deputy-manager. He was originally a performer on the York stage, and afterwards as a prompter at the Haymarket Theatre, London. He was author of two or three plays. The volume issued by Marchbank was well printed, as also the second volume by Folds. Hitchcock inscribes his work to the Right Honourable the Earl of Grandison. There is appended to the first volume a list of subscribers, embracing many personages of note at the period. Both in 1788 and in 1794, when the second volume of his work was published, Robert Hitchcock was living at 4 Clarendon-street, Dublin. Hitchcock's wife acted for some time on the boards of the Crow-street Theatre, during the time of her husband's connection with that house. Marchbank appears to have done a considerable deal of profitable printing in his time, and had influential friends in corporate and public offices. He lived many years into the present century.

William Folds, of Great Strand-street, perpetuated his business and name in the persons of his sons, John S. Folds, of Bachelor's-walk, and George Folds, of St. Andrew-street. William Folds, of Great Strand-street, for long years conducted a respectable and profitable printing business. The now very rare tract of Joseph Monck Mason, "Essay on the Antiquity and Constitution of Irish Parliaments," was printed by William Folds in 1820. Folds was one of the old school of respectable Dublin printers, and in costume and habits kept up the customs of the eighteenth century. John S. Folds in 1832 removed from his former premises 56 Great Strand-street to 5 Bachelor's-walk. He was the first printer of the *Dublin Penny Journal*, twenty-nine issues of the periodical being printed in Strand-street, before his removal, and twenty-four on Bachelor's-walk. The publication next passed into the hands of the late Philip Dixon Hardy, then of Cecilia-street, in whose hands it continued till it ceased in 1836, having completed four volumes.

It will not be out of place to embody here what we have written a few years ago in connection with Bachelor's-walk. No. 5 (now No. 6) was a rather historical printing-office during the management of J. S. Folds, and was visited by many of our dead and still living *litterati*, several of whose works were printed there. It was at one period one of the largest and most respectable printing-offices in the city. An alarming fire broke out in Folds's printing premises on New Year's night, 1841, by which they were entirely reduced to ashes. Many rumours were circulated as to the origin of the fire, which was put down to the act of an incendiary. There were several Scotch and English compositors employed, brought across the Channel to take the place of society hands who had struck work some few months previously, and the fire was attempted to be attributed to their instigation. It was said that a well-known "rough" drayman of the name of H—y, belonging to the "Lotts," was bribed to set Folds's premises on fire; but we believe the true cause was owing to a stove whose fire was incautiously raked out on the boards of the flooring at leaving-off time. At the time the insurance had lapsed, through some dispute with the agents. Folds sought compensation for malicious burning from the city, and at a trial at Queen's Bench the jury awarded him £2,000 damages. A short time previous to the fire Folds had an offer of £8,000 for the good-will of his business from a London firm, but he wanted £10,000. The sheets of the late Charles Lever's "Charles O'Malley" suffered to a large extent by the fire. In the novelist's



epistle to G. P. R. James, an English brother novelist, Lever thus alludes to the incident:

"With a scrap of note-paper just saved from the flames,  
I sit down to write to you, my dear James."

In 1845 J. S. Folds started in a newspaper speculation, and issued the *Dublin Times*. This newspaper venture was begun by Folds in conjunction with a few other persons; but after a short time Folds's partners deserted him. The paper came out first with a great flourish of trumpets, and it was circulated for a while by a number of red-coated runners, dressed not unlike huntsmen, and with glazed hats. The following year the printer levanted to America, and was adjudged a bankrupt. After his disappearance several untrue charges as to money transactions were made against poor Folds, but we believe they were false, and were preferred to screen the doings of others. The concerns passed into the law courts, and, being put up for sale, were purchased as a speculation by our late Irish novelist, Joseph Sheridan Le Fanu, with money advanced by M——h, a solicitor. The successor to Folds was put into the concerns by the novelist; but Bull having died after a short interval, the solicitor took the concerns into his own hands, as his advances had remained unpaid.

In passing we may remark that the *Ward* and *Protestant Watchman* were published in this office on Bachelor's-walk for some time. The former paper, which still lives, was once a lively journal in the days when the witty Terry O'Driscoll's letters appeared in its columns, whose letters were dated from Stonybatter. The "Stonybatter" idea had a much older origin, for we were informed some years ago by the late Michael Staunton, then Collector-General, and the founder and proprietor for many years of the *Morning and Weekly Register*, that the term was first used in the *Register*.

The *Dublin Penny Journal* was the first earnest and partially successful attempt at founding in this country a cheap national literature. The publication of the *Dublin Penny Journal* evoked a considerable deal of native genius and talent in various directions. It created a number of young poets, novelists, antiquaries, and artists, and the journal was the pioneer of many subsequent and similar literary ventures in this city. Although the *Dublin Penny Journal* of Folds and Hardy (1832-6), the *Irish Penny Magazine* of Coldwell (1833), and the *Irish Penny Journal* of Gunn and Cameron (1840-1) were non-political, yet they were truly "racy of the soil," and laid the foundation of the literature of the "Young Ireland" school of literature and politics.

Among the principal contributors to the pages of the *Dublin Penny Journal* were: the late John O'Donovan, George Petrie, Cæsar Otway (under the *nom de plume* of "Terence O'Toole"), Hickey (*i.e.* "Martin Doyle"), James Clarence Mangan, Thomas Ettingsall, a fishing-tackle manufacturer, and a good story teller; Robert Armstrong, originally a journeyman painter, and afterwards a parish schoolmaster at Raheny, who was a good artist and an antiquary; Samuel M'Skimming, the historian of Carrickfergus; Edward Walsh, the poet and story writer, and a number of others. Some of the writers on the *Dublin Penny Journal* contributed to the pages of the *Irish Penny Magazine*, and afterwards to the *Irish Penny Journal*, the second enlivened by the pen and pencil of Samuel Lover, and the topographical sketches of the late John D'Alton.

But we are travelling ahead of our subject. The volumes of the first *Dublin Penny Journal* are yearly getting very scarce. They are a real storehouse of Irish legends and antiquities. The woodcut illustrations—several of which were by Benjamin Clayton, the son of Samuel Clayton, who engraved a number of the copper-plates in the old *Anthologia Hibernica* of 1793-4—were very creditably executed for the period. Many of these woodcut illustrations have from time to time for years been made to do service in a variety of ways in cheap story-books and illustrated almanacs.

In fact, many of the illustrations of the *Irish Penny Journal*, *Irish Penny Magazine*, as well as the original *Dublin Penny Journal* of Folds have been utilised in various ways, and "used up," and again copied and re-copied, and recut and re-cast.

From 1794 we have run down the course of years in connection with one Irish firm, from the early days of the elder Folds to the end of the Dublin career of his son. These intervening years witnessed great changes in the Irish printing and publishing trade, some particulars of which we may hereafter relate.

The present writer may be excused for pointing out that between the cheap early native literary enterprise of Folds nearly half a century ago and the *IRISH BUILDER* there is a connecting link. The first and present printer and proprietor of this journal began his career in the office of John S. Folds on Bachelor's-walk, and doubtless he can remember much of what the writer has stated, and can testify to its truth. It is a something for one to be able to point back to early days and early associations connected with a creditable literary venture; and at the end of nigh fifty years to be found assisting and endeavouring to develop another nigh twenty years in existence, and sustaining it despite of many obstacles, and making it yearly more creditable to the literature of the country, and the professional interests it represents.

In 1793 appeared an architectural work, which, though not printed in this city, bears jointly the London and Dublin publisher's or agent's name—"Hooper, London; Mercier, Dublin." This volume deserves some notice, as it was the work of a young Irish author and architect—James Cavanah Murphy. The work is entitled, "Principles of Gothic Architecture Illustrated from the Designs of the Church and Royal Monastery of Batalha, in Portugal; with an Historical and Descriptive Account of that Famous Structure; Translated from the Portuguese of Father Lewis de Sousa, to which is prefixed an Introductory Discourse on Gothic Architecture." This work was folio, and was issued in parts. The work of Murphy owed its appearance to the patronage of the Right Honourable William Conyngham, to whom other native authors were also much indebted. When Mr. Conyngham was in Portugal he visited the structure mentioned, and, on his return to Ireland, having a high opinion of Murphy's talents, he advised and assisted him in making a journey to Portugal, for the special purpose of delineating and describing the building named. The work contains a general plan of the church and monastery, elevations and sections, and is dedicated to Mr. Conyngham. There is a good likeness given of Murphy's patron, engraved by Schiavonetti, from a painting of Stuart's. In this architectural work Murphy propounds a curious theory in his introduction respecting the origin of the Gothic arch. Here are his singular views:—

"The writers who have hitherto treated on this subject, have principally directed their attention to the *pointed arch*, which they seem to consider as the leading characteristic of this species of architecture. Many disquisitions have been written concerning its origin, but it still remains unexplained. I have bestowed much thought on this part, and flatter myself that though the conjectures I am about to offer respecting its origin are entirely new, they will upon mature consideration, be allowed to approach as near to certainty as the nature of the subject will admit. If the pointed arch be considered detached from the building, its origin may be long sought for in vain, and indeed I imagine that this is the reason it has eluded the researches of so many ingenious men; but, on the contrary, if we examine it in a relative view, as a part in the composition of the whole, it will become more easy to account for its form, or that of any other component part. If we take a comprehensive view of any of these structures externally, we shall perceive, that not only the arch, but every vertical part of the whole superstructure terminates in a point. And the general form, if viewed from any of the principal entrances (the station from whence the edifice should be taken) will be found to have a pyramidal tendency. The portions of the first story, whether they be three or five in number, are

reduced to one at the top, and this is sometimes crowned with a lofty pediment, which might be more properly called a pyramid, as we see in the transept front of Westminster Abbey and York Minster. If we look further, in a direct line with its apex, we frequently see a lofty spire or pyramid rising over the intersections of the nave and transept. Each of the buttresses and turrets is crowned with a small pyramid. If niches are introduced they are crowned with a sort of pyramidal canopy. The arches of doors and windows terminate in a point, and very little accessory ornament which enriches the whole has a pointed or angular tendency. Spire, pinnacles, and pointed arches are always found to accompany each other, and very clearly imply a system founded on the principles of the pyramid. It appears evident from these instances that the pyramidal form actually exists through the several component parts, and the general disposition of the edifice approaches as near to it at least as the ordonnance for an historical painting which is said to be pyramidally grouped. Hence we may comprehend the reason why the arch was made pointed, as no other form could have been introduced with equal propriety, in a pyramidal figure, to answer the different purposes of uniformity, fitness, and strength. It is in vain, therefore, that we seek its origin in the branches of trees, or the intersection of Saxon or Grecian circles, or in the perspective of arches, or in any other accidental concurrence of fortuitous circumstances. The idea of the pointed arch seems clearly to have been suggested by a pyramid, and its origin must consequently be attributed not to accident but ordination."

Of course Murphy's theory was combated by other writers; but it is not our purpose to enter into the subject in these papers. The volume above noticed, in paper and typography, was well turned out; but its mechanical get-up belongs to London, though the authorship is Irish. Murphy was the author of several other works of a kindred kind, and illustrated. He spent several years in Spain and Portugal, and produced a number of works in illustration of the antiquities and history of those countries. His volume on the "Arabian Antiquities of Spain" contains ninety-seven fine plates, depicting the Alhambra. It were to be wished that the author devoted some of his time to the subject of the illustration of Irish antiquities in his day. Murphy was born in 1760, and died in 1816.

The same London publisher, Hooper, issued Captain Grose's "Antiquities of Ireland," which were unfinished at the antiquary's death, which took place in Dublin in 1791. The work was continued by the captain's nephew, Daniel Grose, the Rev. Edward Ledwich—himself the author of a work on the Antiquities of Ireland—assisting. The Right Hon. William Conyngham greatly assisted the publication of Grose's "Antiquities" by a valuable donation of drawings by Barrolet, Bigari, Wheatley, Penrose, and other artists.

In passing we may observe here that about the year 1781 Mr. Conyngham used his influence in uniting the labour of a number of Irish antiquarian writers for the illustration of a fine collection of drawings which he was then making at considerable expense. Colonel Vallancey, the antiquary, then revived his *Collectanea*, which had been suspended for some years. The society of united antiquaries which was formed did not remain long united; but, while it stood together, it comprised the following more or less distinguished names: Right Hon. Wm. Conyngham, president; Charles O'Connor, Colonel Vallancey, Rev. Edward Ledwich, Doctor Ellis, Rev. Mervyn Archdall, and William Beauford. Differences of opinion anent colonisation and etymological theories led to the dissolution of the society; but Vallancey, with the aid of O'Connor, carried on the *Collectanea* till July, 1790, when the publication finally ceased. Not very long after, in 1793, Ledwich, with the aid of some of his old coadjutors, started and carried on the *Anthologia Hibernica* for two years, in which he and his friends had full scope for ventilating their own pet theories on Irish history and antiquities. We have already given a sketch of Ledwich's organ, and its publisher, Richard Edward Mercier, so it is not necessary to dilate further in that direction.



## COFFERDAMS.

INSTITUTION OF CIVIL ENGINEERS (LONDON).

At the fifth ordinary meeting, held on Tuesday the 11th inst., (Mr. George Robert Stephenson, President, in the chair) a "Description of Cofferdams used at Dublin, Birkenhead and Hull," by Mr. William James Doherty, Assoc. Inst. C.E., was read.

The cofferdam\* at Dublin, from the design of the author, consisted of two rows of main piles, of Memel timber, driven at intervals of 12 ft. from centre to centre, with a space of 4 ft. 6 in. between the rows for the puddle. The main piles in the outer row were 32 ft. in length, and in the inner row from 40 to 42 ft. The spaces between the piles of both the outer and inner rows were filled with sheet piles 6 in. thick. The sheet piles of the outer row were driven 12 ft. into the ground, and, reaching up to the level of high water, were 28 ft. long. Those in the inner row were of a similar length, driven to the level of the foundation of the new wall, 24 ft. below low water. On the inner sides of the dam the faces of the sheet piles were in a line with the main piles. The piling, for a length of 150 ft., was driven during the winter, when clay could not be readily procured for puddle. The author therefore substituted peat-moss, which fairly answered the purpose. After the exclusion of the tidal water when the dam had been sufficiently strutted against the old wall, a row of piles 25 ft. long was driven on the land side about 32 ft. from the inner side of the dam, and spaced to correspond with the main piles. Between these inner piles 3-in. sheet piling was driven from the surface of the roadway to below the foundation of the old wall. In this piling there was a recess 10 ft. deep, and from 15 to 20 ft. in length, in which pumps were erected. As the removal of the old wall was proceeded with, the stone of which it had been built was worked up in the new wall. When this masonry and the struts against it from the dam had been removed, whole-baulk struts, 30 ft. long, were inserted between the land row of piles and the cofferdam. A row of close sheet piling, 24 to 26 ft. long and 6 in. thick, was then driven along the land side to support the adjacent roadway; it answered also to receive the strutting of the dam. The struts through which the piles were driven consisted of 2 ft. of soft mud, 4 ft. of fine sand, 3 ft. of vegetable deposit, overlying a bed of alluvial clay of from 4 ft. to 11 ft., and a bed of gravel, interspersed with sand, boulders, and in some cases clay. On taking out the excavations for the first length of the wall, the bed of clay gave sufficient puddle for the next length of cofferdam, and so on to the end of the work. The use of peat-moss was therefore discontinued. The horizontal struts for supporting the cofferdam and the roadway were 6 ft. apart, vertically, for the three upper tiers, but as the pressure increased the distance was diminished to 5 ft. The pressure appeared to reach its greatest intensity at 16 ft. below low water. As it was found that the whole timber-wallings were in many instances broken, the distances between the main piles and struts were reduced from 12 ft. to 10 ft. from centre to centre. To prevent the wallings from being crushed at the point of contact with the struts, which were frequently indented to the extent of 1½ in., facing-pieces were spiked against the wallings on the front and back, and against these facing-pieces the ends of the struts were butted. Even when the distances were reduced to 10 ft., these facing-pieces were splintered with the pressure, yet they preserved the wallings from injury. Although the greatest care was taken in driving the piles, and they presented a uniform surface for 4 or 5 ft. after entering the ground, yet in most cases the points were separated from each other by intervals of from 4 to 6 in. In consequence of the sand inside the dam lying immediately underneath the puddle, care had

to be taken to prevent water from getting through it. The only "blows" that occurred, directly through the dam, were caused by water making its way at some of the open joints or where there was a broken pile, carrying in its course the sand, and leaving a space underneath the puddle, which then sank. So soon as a length of 200 lineal feet of wall had been built, a cross-dam was constructed between the wall and cofferdam. The total length of river wall was 2,310 lineal feet, the contract price for which was £131,728, or £57 10s. per lineal foot, exclusive of the dredging of the fore-shore. About 156,000 cubic feet of whole and half timbers, and 21,000 cubic feet of planking was used.

The cofferdam across the entrance to the Low-Water Basin at Birkenhead was next described. It was on plan the segment of a circle, whose chord was 476 ft., and versed sine 76 ft. It was built in the year 1859-1860 at a cost of £28,000, or £56 per lineal foot. An account of its destruction by the irruption of water had been previously given by Mr. J. Ellacott, M. Inst. C.E.

The cofferdam across the Victoria Dock at Hull was one of a series designed to allow the trade of the Dock to be carried on without interruption during the time an extension of 7 acres was being added. The cost of the dam was £21 per lineal foot.

### BELFAST HOSPITAL FOR SICK CHILDREN.

THE Belfast Hospital for Sick Children, the new building for which forms the subject of our illustration in the present number, was opened in June, 1873, in King-street, in a house taken for the purpose, and has since met with so much success that the committee have determined on the erection of a building to suit their increasing requirements.

A plot of ground has been selected in Queen-street, a locality which combines comparative quietness with proximity to that part of the town chiefly occupied by the poorer classes. The foundations have been commenced, and it is hoped the new building will be ready for use in a few months.

Considerable difficulty has been met with in arranging the plan on so contracted a site, so as to secure the maximum of light and air, with the maximum also of accommodation for the inmates.

The hospital portion is arranged chiefly in the rear, so as to be removed from the noise of the street, the front building being devoted to administrative purposes, comprising board-room, servants' hall, kitchen, store-rooms, matron's apartments, and bed-rooms for the officials. There are also several rooms which will be used either for a better class of patients, or for lady students, as the board may hereafter decide.

The hospital block, which is arranged to receive light on three sides (the wards themselves form two), has the extern department on the ground floor, entered from College-court, and so arranged that the patients enter the waiting-room, pass into the consulting-room, and from thence to the dispensary and so out, without any interference with each other or the ordinary working of the establishment.

The in-patients' wards occupy the first and second floors, and consist of two large wards to hold 18 beds each, nearly square on plan (the committee having wished to avoid as much as possible an hospital appearance, and to ensure cheerfulness), and two small wards for isolated or special cases. With the rooms previously mentioned there will be accommodation for 50 beds. Nurses'

kitchens and bathing and preparation rooms, &c., adjoin each ward—and operation room and mortuary are also provided. The laundry, wash-house, and drying-room form a low building in the rear, so as not to affect the admission of light and air to the wards, &c. In explanation it may be stated that the lighting of several of the rooms on the ground floor is much more perfect than can be shewn on the plan without the aid of sections, &c.

The buildings generally are of brick, with hollow walls, but a front of Scrabo stone (the one shown in the illustration) is provided towards Queen-street.

The contract has been taken by Mr. Wm. McCammond, of Brookvale-terrace, for the sum of £3,840. This does not include railings front and rear, nor internal plumbing work, which being a specialty has not yet been finally arranged by the medical staff. The architects are Messrs. Thomas Jackson and Son, of 5 Corn Market, Belfast.

A bazaar is to be held on the 20th and 21st of this month for the benefit of the funds of the institution.

### THE OPENING OF MASONIC HALL, MOLESWORTH STREET.

THIS building, which was recently completed, was formally opened on the 5th inst., with great ceremonial, His Grace the Duke of Abercorn presiding. The hall within has been subject to an elaborate process of decoration by painting, gilding, &c. The apartment is larger than St. Patrick's Hall, Dublin Castle. It is a parallelogram in shape. Along each side are six pillars with Corinthian capitals, and there are two of the same style at each end. These are painted to represent white enamel. The capitals are gilt; the pedestals and lower part of the wall are painted a rich chocolate colour; between the pillars the wall spaces are painted a light dun colour, each space being formed into a large panel by a matted gilt moulding with a deep margin of grey. The pillars support a richly-designed and gilt entablature. From this spring five semi-circular arches on each side. These arches contain a series of ten cartoons, illustrative of the building of Solomon's temple. The ceiling is intersected by beams, which divide it into five panels, and is painted blue, and studded with gold stars. The intersecting beams, together with the architrave and cornice, are cream-colour and white, relieved with gold. The predominating colour in the painting of the hall is blue, in order to meet Masonic requirements, that colour being associated with the lower ranks of the order, and the hall being used for general meetings; but other tints are introduced in sufficient abundance. The cartoons have been painted in sepia by Mr. Edward Gibson, Great Russell-street, London, son of Mr. James Gibson, of Mary-street, Dublin, by whom the entire of the rest of the hall was designed and finished, and whose design was selected in a competition by Messrs. T. Jones, President of the Royal Hibernian Academy, and Brother Drew, R.H.A.

### NEWRY.

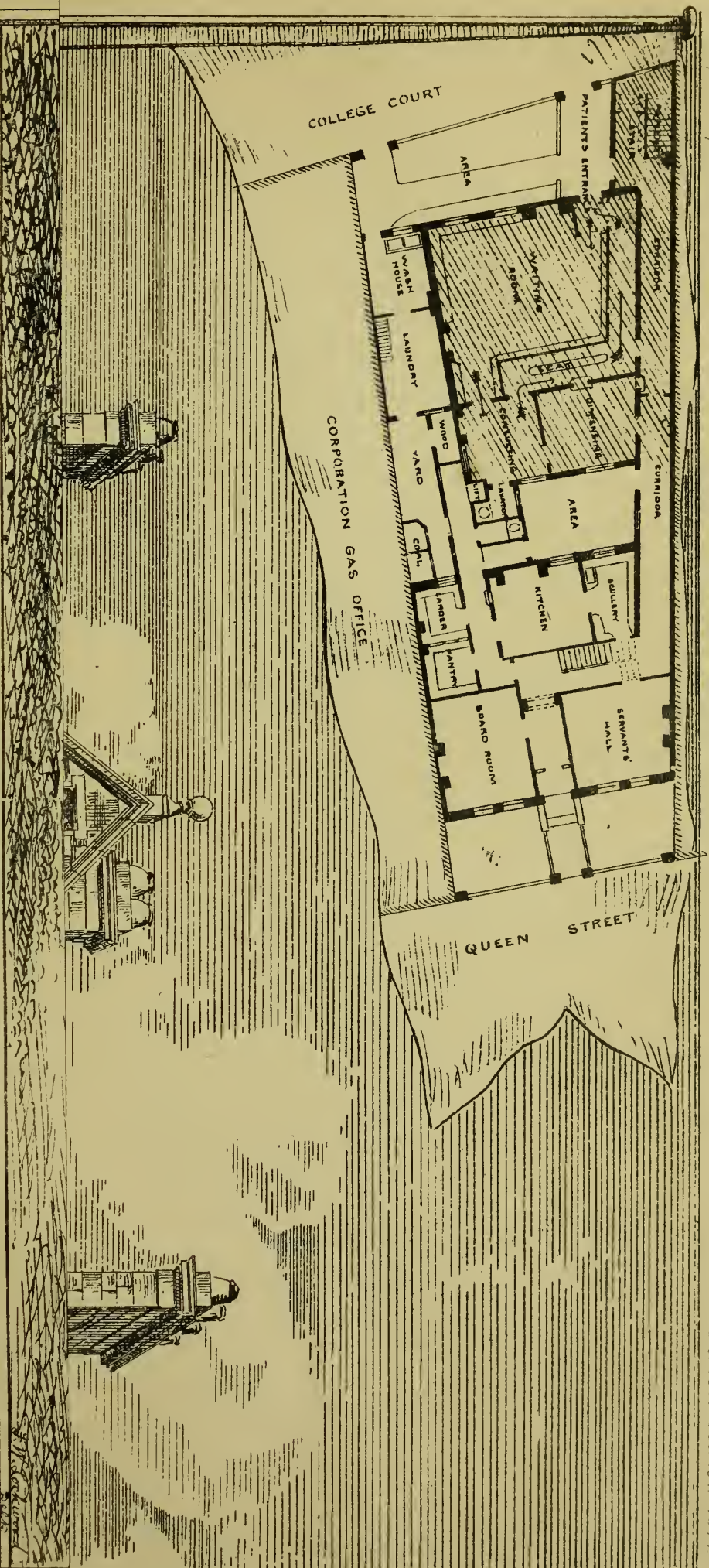
THE bank premises of the Bank of Ireland at Trevor Hill, Newry, have been lately enlarged and improved. The removal of a thick stone wall which separated the agent's office from the public one, has given a clear space of 44 ft. by 17 ft., which will be ample for the business of the bank. The counter is 34 ft. in length by 3 ft. in width, and is surmounted by a handsome screen, with panels of pattern glass. The fittings throughout are of Honduras mahogany of the best quality. The works were carried out from the plans of Mr. Sandham Symes (architect to the Bank of Ireland) by Messrs. Whelan and Watson, of Newry.

\* For South quay wall, recently finished.



The Irish Builder.

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NEW BUILDING QUEEN STREET.  
FOR THE BELFAST HOSPITAL FOR SICK CHILDREN.

J. H. JACKSON ARCHT.

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NEW BUILDING QUEEN STREET.  
FOR THE BELFAST HOSPITAL FOR SICK CHILDREN.



## ADVERSARIA HIBERNICA,

## LITERARY AND TECHNICAL.

ROAD-MAKING, from the time of the Romans, who excelled all other nations in this work, and who have left us monuments of their greatness in this line in Britain, has always been considered an indispensable and important undertaking. Before the era of canal navigation and railways, the making of roads for opening up the trade and improving the country, was a subject for the legislature as well as the landed proprietors to be deeply interested about. The Irish Parliament devoted some attention to the question, and so did the Royal Dublin Society in the last and early in the present century. Some old County Dublin roads were well made, and continued serviceable for many years, while others were always a source of complaint down to the present time. The Blackrock-road at the commencement of the present century came in for marked censure for the manner those entrusted with its repair conducted their operations.

Hely Dutton, the author of "Observations on Mr. Archer's Statistical Survey of the County of Dublin," writing in 1802, remarks:—"With the great profusion of materials almost on the spot, and the great breadth of the Blackrock-road, it might be easily made and kept the best road in Ireland; but before this can be accomplished the system must be entirely changed, and the management committed to persons qualified, and not left to the discretion of ignorant and bigoted men *who keep carts for hire*." The same system has existed upon some of the suburban roadways and county roads down to our own time, of leaving their repair to the discretion of those who own some sand quarries, and let out carts for hire. Some years ago we were often amused at the methods employed for keeping several of the roads of the northern suburbs in repair. No attention was paid at all to the drainage of the roads, or whether they were perfectly flat or sufficiently high in the centre. The mud was seldom scraped off, and when a particular road got very bad with ruts and sludge, a few cart-loads of stones, sometimes field stones, were thrown down upon it, the mud of the road being considered sufficiently good binding material. Along some of these northern suburban roads at long distances octogenarian stone-breakers were to be met with, squatted on a twisted straw cushion on top of a heap of stones, hammering away for life at a lump of flint that showed little sign of breaking. Younger stone-breakers, when employed, were not able-bodied men, but those incapacitated for regular labour by some bodily or other infirmity. In looking upon some of these old school of stone-breakers, the lines of the pauper's burial more than once occurred to us:—

"Rattle his bones  
Over the stones,

He's only a pauper whom nobody owns."

Hely Dutton advocated in his day a National Board of Roads, as he was convinced that matters would never mend under the system that then obtained. Under a Board of Roads he believed "the grand cause, *grand jury jobbing*, will cease, and the conduct be thrown into hands of scientific and practical road-makers." The author we quote tells us himself that he frequently observed labourers giving from ten to fifteen blows of a hammer to one small stone, and very deliberately lift it off the ground each time. If a straw or hay rope, he holds, had been coiled round the anvil-stone, with the assistance of a forked stick, more than one blow to the small stone need scarcely be given.

What will scientific road-makers of the present day think of Dutton's suggestion as to the propriety of having roads *ploughed, harrowed, and rolled*? Rolling roads under the modern system of road-making, and using concrete material, is a very necessary operation, for a good rolling—particularly with a steam roller—solidifies the road metalling. Under still ordinary systems of road-making the roads are, however, picked and not ploughed or harrowed. Dutton not

only advised but carried out his ploughing and harrowing process on County Dublin roads. While engaged on some improvements at Merville Lodge, for Sir Thomas Lighton, one of the partners in Beresford's Bank, Dutton advised the improving banker to plough up the road. The line of the road had been changed by Dutton, but during an absence he found when he returned that the men employed had given the road an extraordinary rise in the middle, made up of very large and hard gravel. Heavy carriages being used over it for some time, the road became very firm. The labourers engaged to pick it up made very little progress in the day, so Sir Thomas Lighton acceded to Dutton's suggestion, and the road was forthwith ploughed up. The work, we are told, was accomplished in a very short time with a common plough; the particular plough in question being described as a wretched instrument. Four weak mules, with the assistance of a man to hold down the beam of the plough, comprised the whole of the animal labour employed.

Dutton having accomplished his work under unfavourable advantages, points to it as the strongest proof of its practicability. He believes if the work of his road ploughing had been tried with four steady bullocks and a suitable plough, it could have been accomplished with the greatest ease; for that the mules employed were so very unsteady that when the plough met with any resistance, two of the mules would give back and the other two plunge forward. Dutton harrowed his road, had the large stones picked off, the surface levelled, and the whole passed over by a heavy metal roller.

In the history of ancient and modern road-making, Dutton's example of road-making by the use of the plough is the first and only instance that has come under our notice. It would, we opine, take a powerful steam locomotive plough to turn up some of our modern made roads, though there are not a few in the City of Dublin that are well ploughed up already. It would take something stronger than stubborn mules or steady bullocks to draw out some of our civic magnates and officials to do their duty by the roads north and south of the Liffey.

It is instructive and interesting to look back occasionally at the origin of some national and public works in this country, and to view their early surroundings and the class of men associated with their management. The Grand Canal Company was incorporated in the year 1772, for the purpose of carrying on and completing a canal, already begun by the Commissioners of Inland Navigation, from Dublin to the River Shannon. The first passage-boats ran in 1783, only plying, however, as far as Sallins. Three years afterwards they ran to Monasterevan, and in 1791 to Athy. About 1802 three passage-boats left Dublin, at different times every day, for Athy, Tullamore, and Robertstown respectively, and the same number returned to the metropolis from these places. At Lowtown, twenty miles from the city, the canal branches off to Phillipstown and Tullamore. As early as 1796 the communication with Waterford was complete. The Barrow Navigation Company soon established passage-boats plying regularly between Athy, Carlow, and Groganmanagh. Two years previous to the Rebellion of 1798 there were about eighteen miles to complete the connection of the canal with the Shannon. In 1802 the cut from Tullamore to the river named was nearly complete. It is not necessary to enter into long details. The work of inland navigation was, no doubt, a great project in its time, at a period when railways were undreamt of, and up to the period of the construction of railways they accomplished most useful service. Notwithstanding the general disuse of the coach system, the use of canals for passage-boats, and the conveyance of passengers, the canals are still useful for several kinds of traffic where time does not press. In looking over the list of the directors of the Grand Canal a short time previous to the Union, we

find the names of Richard Griffith, a well-known name as chairman, and his deputy, John Macartney, M.P., a member of the Irish Parliament. Among the directors were also two other M.P.s of the Irish House: Charles William Bury and Major-General Charles Eustace; William Digges LaTouche was treasurer; and another director was Eyles Irwin, who was a member of the Royal Irish Academy, and an author of several works in his day, now nearly forgotten. Irwin, though born in Calcutta, was of Irish descent. He held an appointment in the East India Company's service, and was enabled to retire with an independence. Irwin died at Clifton in 1817. In the Grand Canal Company's service, filling the office of collector, we find the name of Sisson Darling. If we remember aright this worthy gentleman was no other than Sisson Putland Darling, under whom Theobald Wolfe Tone received part of his education. In 1786 we find that Sisson Darling kept a mercantile academy on the North Strand. This was some years previous to the date of our list in which his name figures as a collector of the Canal Company. We might make a note or notes of others whose names figure among the list of the early directors and officials of the Grand Canal Company; but the subject may turn up under another form at an early or opportune time.

Who among our old citizens has not heard of the public institution once existing in Dublin, known as "Channel Row," a place of ominous import, where the wicked or lazy did not cease from troubling, nor the weary did not find the rest they needed, or thought they needed? "Channel Row," ye modern citizens, was the "House of Industry," for in the mouths of our people the two names were convertible terms; although the house was not a street and the "Row" was not in the "House," "rows" were rife betimes there. Channel Row, to be plain, was not far from the neighbourhood of the present North Brunswick-street, but, according to our old directories, it was situated in the district known as Glasmanogue, embracing the present Broadstone quarter. The old House of Industry was under the direction of the Corporation, instituted for the relief of the poor and for the punishment of vagabonds, and was opened in the year 1773. It was supported for a long time by parochial collections made from house to house, annual subscriptions, charitable donations, royal bounties, parliamentary aid, and by profits arising from the labours of the poor. The House of Industry was not very long in existence when it became a name of terror to many, and was used as a bugbear to frighten unruly children and others. There were wards for the aged and infirm, an hospital for the sick, and cells for lunatics; and if report speaks truly, many who went in sane to the House of Industry soon became lunatics. In the latter end of 1784 there were 1,350 inmates. From November, 1784, till November, 1785, there were admitted 2,038; compelled, 1,059; total, 4,447. Between November, 1784-1785, there were 2,679 discharged, 483 died, and 30 "eloped," which means "ran away," and others would have done the same if they got the chance. It is believed that great abuses existed in connection with the management of the House of Industry, which was a house of laziness for hundreds, and a home of cruelty for many others. It was a poorhouse more than a workhouse, where several hundreds, reaching over thousands betimes, of people were pent up like sheep, without any proper system for keeping the able-bodied among them employed. Thousands upon thousands of pounds were wasted, and at last Channel Row got a vagabond name, perhaps not a bit worse than its management deserved. The "House of Industry"—miscalled, like the old Foundling Hospital—proved a curse instead of a blessing, and we fear that hundreds upon hundreds of the really benevolent died with their fond illusion as to the value of such institutions undisputed. H.



## GREEK AND ROMAN ART—

THEIR CONNEXION WITH THE TEACHING OF THE CLASSICS.\*

## LECTURE III.

(Continued from page 355.)

THIS day week we tried to get a survey of the range of ideas which were embodied by the ancient Greeks in their various forms of art.

To-day we come to another consideration. It is evidently a very different thing to know what was the range and extent of the conceptions of antiquity embodied in the works of art, and to know what remains of those works—what vestiges out of that enormous multitude of things—still exist for us to study.

We shall try and go very briefly through the history and the origin of our modern collections, and the distribution of the chief monuments that have come down to us. There are two divisions of this subject. One is the inquiry into the various places where the existing remains were found; and the other is the inquiry where they are now deposited, or "museography," as the Germans call it.

It is necessary, before we begin to discuss the places of discovery, that we should, in some way, classify the varieties of remains discovered; and this is not a very easy classification. You may classify according to the art employed, and say, for instance, sculpture and pottery; these sound like two distinct classes, but when you go into details you find that there is no hard and fast line between them. When you have a vessel of clay upon which figures are raised, or the handle of which is carved with figures in the round, the question arises—is that pottery or is it sculpture? Again, the single class of statuary exists in various forms—in bronze, marble, terra-cotta, and so on; so that there is nothing for it but to be content with a little confusion; and I shall take sculpture to mean statues of all kinds, whether in the round or in relief, and all the minor arts connected with them as one main division, and then painting as the other main division. As early as two centuries ago an inquirer tried to establish a classification amongst these things, and he invented a long word, or rather a string of words rolled into one long word, and called this study epigrammato-numismato-biblio-glyptico-toreumato-angeiography.

I will not trouble you with the first member—with the study of inscriptions—which includes an enormous part of the subject, but one which we are altogether leaving aside. "Numismato," or coins, is one of the classes I shall have to deal with; "Icono" means the study of portraits; "Toreumato" means the study of a particularly interesting class of works—those wrought by beating, or chasing upon metal—figured cups and armour, and so on. "Angelo" means the study of vases. Without troubling you with too complicated divisions, let us turn at once to the great classes which are roughly called sculpture, and consider where principally, and at what times, our chief remains of ancient sculpture have been found, where they are distributed, and what are the chief resources of great museums and collections.

Statues, you remember I said last week, were divided, as to the material of which they are composed, into three great classes; first of all, that which was the most precious, honourable, and noble class—statues of gold and ivory, which were exclusively, from the nature of the material, housed in shrines, temples, and covered places. That class has entirely disappeared. Then comes bronze, and, alas! too much of the bronze has also perished irredeemably. Bronze was the favourite material for statuary in the ancient world, and accordingly, when a Greek talks of a statue, either of a god or a hero, you generally have to understand bronze. In the great crowded valley of Olympia, which was peopled with multitudinous dedicated statues, the numbers of which we hardly dare guess at—in that and in all similar congregations of statues—bronze formed a much larger proportion than anything else. If we read about a Roman triumph, how this or that Roman conqueror trailed off so many statues, and the triumph lasted so many days, we shall always find more bronze than marble statues in the enumeration. Bronze it was, which, from the severity of the material, on the whole, best expressed the genius of Greek art. The art of Phidias, and of the age of Pericles, in the fifth century before Christ, was in the main a bronze art, but, unluckily, bronze has an inconvenient adaptability for being turned into pennies; and whenever bronze has been found by subsequent barbarians, it has been taken and melted down, and disappeared long ago—passed into the current coinage—so that our existing remains of bronze are comparatively few,

and comparatively disappointing. Numerically speaking, by far the greatest number of important bronze statues in existence are those discovered on the site of ancient Herculaneum. Herculaneum having been buried very deep, under a thick and almost impenetrable layer, by the great eruption of Vesuvius, nothing of importance was robbed or taken away from it; and at the time that it was opened in the last century, about 1745, a great part of the furniture and luxuries and works of art belonging to the population was discovered, and amongst them a considerable number of bronze statues and statuettes. Of course, as they are things found on a Roman site, the greater part of these are Roman works—copies, that is to say, of Greek things. Therefore, although there is a great store of beautiful statues in the museum at Naples, which have been chiefly brought from Herculaneum, you cannot be sure that any of them are original Greek works of the time, though there are one or two things of extreme beauty, such as the figure of Narcissus. The Naples museum is by far the greatest receptacle of these things—there are more bronzes there than anywhere else. Every now and then a great find of bronze had turned up elsewhere. Not very many years ago, in the Italian town of Brescia, on the site of an ancient temple, a complete bronze figure, over life size, and of great beauty—a winged draped figure of Victory writing on a shield on her knee—was discovered. That was a very precious thing to find, but it does not bring us face to face with the real fountain-head of these things. The type is one which occurs often in Roman art. You may see it on the first course on the well-known sculpture of the Column of Trajan—it is a thoroughly Roman type. Such fragments of true Greek bronze as are found, are, of course, at all times, the most valuable contents of museums. Just now, at Olympia, an interesting discovery has been made, that is to say, the ear and horn, with a small portion of the head, of a very famous bronze cow, dedicated in Greek antiquity. The pedestal has been found, and we know who the artist of the cow was, but all that seems to be remaining is this small fragment of the ear and horn. That, I am afraid, is about the proportion which almost all works in bronze are likely to bear to the old originals. You have all been interested in that splendid bronze head brought to the British Museum. We do not know where that comes from; it has all the aspect of being Greek, and of the great Greek time; the legend is that it was found by a Turkish treasure-hunter in a deep hollow in the mountains of Armenia, beyond Erzerum. In the British Museum, and elsewhere, where antiquities are collected, you will find a considerable number of small bronzes, chiefly lesser ornamental things, and of immense interest, but not fully enabling us to realise what the Greek statues of bronze were. We are only too glad of our one or two perfect fragments—such as that brought home from Greece by Mr. Hawkins—a mirror-case with the figures of Venus and Anchises, or of little perfect fragments of broken armour, such as are in the British Museum. We are only too glad when small fragmentary scraps of that kind survive to us. There is another race of antiquity, which, in the working of bronze and in the technical parts of metallurgy, was in advance of the Greeks themselves, and had a pre-eminence in that art which was fully recognised by the Greeks, namely, the Etruscans. A vast quantity of these bronzes do remain, especially ornamental candlesticks, funeral chests for ashes, ladies' dressing-cases, &c., more or less figured, the study of which is extremely interesting, only it is not the central study of Greek art. These artists were of a different race, and their art is of a different kind from the Greek. Their work is of admirable mechanical quality, but, where they most closely imitated the Greeks, there is a want of the genuine Greek spirit. Therefore, in thinking of our remains in bronze, and of the number of them in museums, and particularly in the British Museum, which contains many precious fragments—though there may be still a hope of finding more, the great resource must be the museum at Naples, supplied principally from Herculaneum. On the whole, our treasure in this most precious branch of ancient sculpture is miserably scanty compared with what one would desire.

Then we come to the material of which most of the figures that remain to us are made—marble of all kinds. There was a time in the thirteenth century, when the number of antique sculptures in marble that were known to exist in Europe was very small indeed, when there were hardly any known. One was the well-known piece in the Campo Santo, at Pisa, in that famous burial-ground supposed to be filled with earth brought home from the Holy Land by the Crusaders. Very soon after it was built, certain ancient Roman sarcophagi were set up within it, which, most probably, were found in the neighbourhood. The tradition, however, was

that these Roman sarcophagi (one representing the hunt of the Calydonian boar) had been brought from Greece. It is not the Greek kind of work, but Roman; and there is very little doubt that they had been in Italy from the first. These were studied early in the Middle Ages, and were a great help to the nascent art of Europe; making, in fact, the first step towards the European Renaissance. One was used for the sarcophagus of the Countess Matilda, the most honoured name of all Tuscany. During that curious border age between the Middle Ages and the Renaissance, there were strangely mixed feelings in the people amongst whom these antiques were occasionally found. For instance, in the neighbourhood of the city of Siena, an ancient statue was found one day, and it was brought home and set up with great pride and honour. Then, as always happened, they were at war with their neighbours, and were defeated. They then said, "Someone is angry with us for some impiety; we have brought this heathen thing into our borders and that has brought this misfortune upon us." So they broke up the statue into pieces, and made an expedition over their enemies' borders at night, and carefully deposited the fragments of this broken statue in the Florentine border, convinced that it would bring defeat to the Florentines. However, sentiments of that kind did not last long, and by the time one gets to about the year 1400, on the threshold of the modern world, we find all that doubt and hesitation towards the works of antiquity utterly disappear, and a universal enthusiasm and desire to find more, and a universal admiration and acclamation for whatever was found, succeeds to those forgotten feelings.

I think in my first lecture I mentioned, as the fruit of an exploration of this kind, that the archaeologist, Cyriac of Ancona, who, in the course of his business travelled all over the Levant, having found some of these things, presently repeated his travels in search of such remains, and brought home with him great stores of gems, copies of inscriptions, and whatever valuable works of art he could find. Almost at the same time, that is to say, before the middle of the fifteenth century, Squarcione, of Padua, the founder of a great school of painters, went to the East, and bought things from merchants, and set up a school with casts from antique figures and originals. Then was the dawn of the collection of ancient marbles. The practice grew apace from that time onward, and at the end of the fifteenth century comes the beginning of the exploration—I may almost say the scientific exploration—of Rome. From the end of the fifteenth to the end of the sixteenth century was the most active time for the discovery of ancient statues in Rome itself. Of course you know that the number of ancient marbles found in Rome far surpasses all that has been found in any other place whatever. The number of statues found in Rome has been sometimes attempted to be calculated, and 170,000 has been named, but it is quite impossible to tell. From the date of which I speak—a few years before 1520—to the end of that century, there went on a most active and eager competition between the great potentates—princes, cardinals, and popes—in this matter. At this time was discovered the famous statue of the Laocoon, the main figures in the Niobe group, the Apollo Belvedere, and so on. Each one was welcomed with immense enthusiasm, and princes, cardinals, and popes vied with each other for the purchase of them. In those days were formed, first of all, the great private galleries, such as the Farnese gallery and those of the Carpi, Cesi, Ludovisi, and Medici, which have since made Rome famous. Presently, the greatest of all these collections—that of the Medici—was transported by that family to Florence, and is now the nucleus, or nearly the whole, of the Uffizi collection. The great thing in that collection is the famous Niobe group (which is of the school of Scopas or Praxiteles), originally found in Rome in 1583, together with other well-known figures, such as the Two Wrestlers. At that time, also, the Popes, who were the first collectors, began to accumulate in the Vatican the Belvedere collection. This collecting activity has never ceased. It had a fresh revival in the latter part of the eighteenth century, but the people who collected then were people of a different race. From about 1500 or a little earlier, down to the eighteenth century or a little later, the great source and centre of the knowledge of our ancient marbles was Rome. After the great Italian princes and cardinals, the next great amateur was an Englishman, in the time of Charles I. Lord Arundel was probably the first, at any rate the first conspicuous Englishman, who took an interest in antiquities, and who sent agents to the Levant and the coast of Asia Minor to bring things, not from Rome or Italy, but from Greece itself. The famous Arundel collection has gone through many vicissitudes, but there still remains at Oxford a collection containing a few precious things first

\* Cantor Lecture. By Mr. Sidney Colvin, Slade Professor of Fine Art at Cambridge.



brought together by Lord Arundel. His passion for collecting did not take root in England immediately; it was more than 100 years before it became widespread; but towards the middle of the last century, from the year 1730 onwards, it became the fashion for rich young Englishmen, on the grand tour, to go to Rome, and sometimes even to Greece, and bring home antiques. There are a dozen great houses or more in England stocked with antiques, partly coming from the sale and breaking up of these old Roman collections, and partly from new excavations. The process was of this kind: first of all the great old collections used to be broken up and sold in detail in Rome. Then continual excavations were carried on. There was a regular profession of people who bought fragments of ancient statues, heads, arms, legs, and so on—and restored them, and sometimes with great ignorance of archæology. Nollekens, the sculptor, was engaged in this work, but a man named Jenkins was the greatest of these restorers. It was at that time that all the great English collections, such as that at Holkham-house, belonging to Lord Leicester, those at Woburn, Petworth, Lansdowne-house, Duncombe, Castle Howard, Ince Blundell, Wilton, and many others, were formed. A few of these Englishmen were not content with these things found at Rome but went to Greece, or had agents there, and amongst them was Sir Richard Worsley, the ancestor of the present Lord Yarborough, who formed perhaps the most interesting collection of works, containing a quantity of real original Greek works.

Up to the middle and latter part of last century there had been no regular public national museums. All the collections were in and about Rome, or in England in private galleries. The epoch of museum-forming only began towards the close of the last century. It was only in the eighteenth century, indeed, that the Vatican galleries themselves were in any kind of way publicly installed. First of all, Pope Clement XII. was the founder of the museum of the Capitol, and then Clement XIV., and Pius VI., who installed the famous museum in the Vatican the Pio-Clementino. Presently other countries followed suit, and then came the foundation of the British Museum, which was founded with things belonging to the English amateur, Sloane. The first great addition of marbles made to it were the marbles of Mr. Townley, who had collected in the course of the eighteenth century.

(To be continued.)

## NOTES ON THE EARLY HISTORY OF THE IRISH STAGE.\*

In his ill-starred venture with Barry in the Crow-street management, Woodward expended some thousands of pounds, the result of many years' savings in London, and as the struggle was growing hopeless his uneasiness increased. After declaring his intention of withdrawing himself from the partnership, and when a separation was inevitable, a mutual wish to part appears to have been expressed by both parties. We next hear of an arbitration entered into between the joint managers, but it was not abided by. Each then began to throw the blame on each, and open hostilities were at last made manifest by the publication of the following letter by Woodward, in Faulkner's *Dublin Journal*, dated Monday, July 12, 1762:—"From the late behaviour and conduct of Mr. Barry to me relative to the Theatre Royal, I am advised for my safety to let the public know that the partnership between Mr. Barry and me is dissolved, and also to caution all persons from giving further credit to the said Barry on the partnership account." This was the commencement of a paper war, letters, advertisements, and outside criticism. The curious may unearth the controversy on the files of the Dublin papers of the day. Woodward's letter elicited a recriminating announcement from Barry, followed by a second and a third. The newspaper controversy continued for some weeks before it exhausted itself, for each side had its partisans. As far as Crow-street was concerned, there was a final separation between Barry and Woodward. An authority often quoted, thus writes of the event:—"Thus ended a partnership which promised so much success at the beginning, and from which, though the public reaped such extraordinary entertain-

ment, yet altogether the evils arising more than overbalanced the advantages. The managers lost many thousand pounds, and involved themselves in a suit in Chancery; many debts were contracted, not since discharged, and many obstinate parties and attachments formed, which the following year rather inflamed than appeased." Mossop at Smock-alley was now in the ascendant, and might be said to be the victor, yet he had not much to boast of. The plays he put upon his stage, and the actors he engaged were successful, but his finances were not in a very flourishing condition. To conclude the season Mossop engaged King for a few nights, who in his former visit to Dublin was well received. He appeared in Ranger and Cadwallader, and during his short stay played the Copper Captain, Sharp Oakly, Lord George Brilliant, Benedick, Lovemore, Scrub, Fribble, and Bayes, with success and applause. In these King was supported by Mrs. Abington, who was then considered one of the first comic actresses in the kingdom.

The Crow-street company under Barry proceeded to Cork and Limerick, where they spent the intervening time till the re-opening of the Dublin theatre. The play-bill of their last night's performance at Cork, 3rd of October, 1762, states that the performance was "By particular desire. For the Benefit of Mr. Kennedy. By permission of the Right Worshipful Boyle Travers, Esq., Mayor of Cork." The performance opened on the occasion with Steele's comedy of the "Conscious Lovers," followed with dancing and other entertainments. After the play Austin, one of the actors, spoke the popular epilogue of that day, called "Bucks have at Ye All,"—an epilogue which, we may remark, though once popular, is rather rough and too full of expletives for the stage of the present day. The night's performance at Cork concluded with "Polly Honeycombe." We quote for the edification of present-day readers the final paragraph from the Cork play bill:—"Boxes, 4s. 4d.: pit, 3s. 3d.; gallery, 2s. 2d. Tickets to be had of Mrs. Kennedy, at Mr. Dynam's in George's-street; at the coffee houses, and places in the boxes to be taken from Mr. Burn at the theatre. Tickets delivered for 2nd will be taken."

Nothing very remarkable occurred during the succeeding season in Dublin. Continued opposition had exhausted the exchequer of both theatres, and public interest grew languid. The receipts of both theatres were no more than sufficient for the healthy living of one, and some of the more favourite performers had left. Woodward had proceeded to London, making his appearance at Covent-garden; Mrs. Abington was engaged at Drury-lane; and Browne returned to Bath. The departure of the last two were severe losses to Mossop, which were increased by the going over of Reddish and Sowden to Barry's side. To make up for his losses, Mossop secured Dexter, brought from the sister kingdom Mrs. Burden to fill the place of Mrs. Abington, a position she was not equal to; a Miss Parsons, from the Haymarket; a Miss Skyddart, from the Chester Company; and a Miss Stratford. The second last was said to have a fine voice, and she opened in Nell, and the last made her first appearance in Cordelia. In addition to the above, some of whom we hear little of afterwards, Mossop engaged Foote, who opened in the Minor. Speaking of Foote in respect to his appearance at that period, Hitchcock observes:—"His novelty was now pretty much over, and out of his own eccentric pieces little merit could be ascribed to him." In the early part of the season an actor makes his appearance on the boards of Smock-alley in Sir John Loverule, who some years afterwards became a well-known provincial manager. The actor's name was Atkins, and, being a painter, machinist, and a harlequin, he brought out at Smock-alley a pantomimic entertainment entitled the "Harlequin's Funeral." This piece was relished, and brought some money to the theatre. Of Atkins, it may be added here that he established his theatrical circuit in the North of Ireland, his

winter residence being in Belfast, where he erected a theatre. Previously he had erected a theatre in Londonderry. With Armagh and Lisburn and the two other places mentioned, Atkins formed his regular circuit for the year. His conduct, character, and management, from all accounts that we have met with, were deserving of praise.

Perhaps it would not be amiss to take note of a "Prologue by Mr. Woodward on his first appearance at Covent-garden Theatre, in the character of Marplot, after having been a manager in Dublin four years." We agree with the remarks of the author of the "Historical View," &c., though his losses and anxieties in Dublin might be enough to sour Woodward's temper, yet "it were to be wished he had not, on his appearance at Covent-garden, when he spoke the following prologue, in the character of a returned prodigal, put on that humiliating submission which a British audience were too generous to expect, and which the treatment he had experienced in Ireland could never justify." Leaving out capitals and a heavy sprinkling of italics, the prologue runs:—

"Behold the prodigal—returned—quite tame,  
And (though you'll hardly think it) full of shame!  
Ashamed! so long to have left my patrons here,  
On random schemes—the Lord knows what and where!  
With piteous face (long stranger to a grin)  
Receive the penitent, and let him in.  
Forgive his error, ope the friendly door,  
And then he's yours—and yours—and yours, as heretofore."  
[Pointing to the pit, galleries, and boxes.]

Ye gods! what havoc does ambition make!  
Ambition! I drove me to the grand mistake;  
Ambition! I made me mad enough to roam;  
But now I feel (with joy) that home is home.  
Faith, they put powder in my drink, d'ye see,  
Or else, by Pharaoh's foot, it could not be;  
Belike Queen Mab toucht me (at full o' th' moon)  
With a field-marshal manager's battoon;  
And so I dreamt of riches—honour—power.  
'Twas but a dream, tho', and that dream is o'er!  
How happy, now, I walk my native ground,  
Above, below—nay! faith—all round and round.  
I guess some pleasure in your bosoms burn  
To see the prodigal poor son return.

Perhaps I'm vain, tho', and the cause mistake.  
No—no—yes—yes—for old acquaintance' sake  
Some generous, hospitable smiles you'll send;  
Besides, I own my faults, and mean to mend.  
Oh, ho! they ring—how sweet that sound appears—  
After an absence of four tiresome years!  
Marplot—To-night,—so says the bill of fare,  
Now waits your pleasure, with his usual air.  
Oh! may I act the part still o'er and o'er,  
But never be the busy-body more."

No matter what might have been his differences with Barry, with his Dublin audiences Woodward could have had little complaint, for he was always very well received. When the actor embarked on the sea of a wild opposition, he was certain to be buffeted more or less. He lost his money in a speculation in which many before him and many since have lost theirs, but he gathered experience that was useful to him afterwards. A reference to the list of the respective companies of Crow-street and Smock-alley in 1762 would seem to prove that Barry had the best and strongest company. The tragedies at Crow-street were generally well supported, but at a great strain; and at the very period of which we are writing, Barry's resources were almost exhausted. The dramatic masque of "King Arthur" was brought out in February, 1763, and the greatest support that Barry obtained in the season was from its production, which was brought out under his auspices. The piece was got up with care and attention, the paintings were executed in the first style by Carver; the machinery by Messink and Finny." No expense, we are told, was spared in the clothes and decoration; the dances to the piece greatly enhanced it, and they were executed in the best style. It was a relief to Barry to see on this occasion that the effect produced by the piece was commensurate with the pains bestowed on its production, for we are told that the public were charmed with its representation. Music about this period in Dublin was beginning to attract a little more attention, and to make some progress. What was considered previously only an auxiliary to the theatre, was shortly to take the lead and become the principal feature in the entertainments.

We find in April, 1763, oratorios performed at Crow-street Theatre under the direction of Signior Passerini, who came over to Dublin the previous year. This year, the

\* See ante.



ensuing after season, was also noticeable for the number of London performers engaged by Barry, among whom were Shuter, O'Brien, Dyer, Luke Sparks, Mrs. Clive, Mrs. Lessingham, and the celebrated "Nancy Dawson." This accession of strength of course proved attractive, and the theatre remained open till August.

Though somewhat lato, the successful comic opera of "Love in a Village" was brought out for the first time in this country. It had been performed at Covent-garden for some nights the preceding winter. At Crow-street this opera was creditably supported. The following was the cast: Young Meadows, Mahon; Justice Woodcock, Shuter; Hawthorn, Weldon; Eustace, Dyer; Hodges, Glover; Sir William Meadows, Morris; Cook, Messink; Mrs. Deborah Woodcock, Miss Mason; Lucinda, Mrs. Mahon; Madge, Miss Wills; and Rosetta, Mrs. Lessingham. The double hornpipe was by Slingsby and Nancy Dawson. At Smock-alley Mossop met his rivals by the production of Mrs. Abington, who was a favourite, and of course a welcome visitor. She appears not to have been so well supported on this occasion as previously, yet she was received with applause. Smock-alley closed sooner than Crow-street, the latter, as already stated, keeping open till August, when it finished with the "Stratagem." After an excursion to Cork and Limerick with profit, Barry returned to Dublin to prepare for the ensuing winter season.

#### WASHING THE STREETS.

THE cleansing of the streets of Dublin by washing is again advocated by Mr. Price, C.E. He holds that scavenging with brush and cart, when water is at hand at a high level, is about the most expensive absurdity that could be thought of. He points out the existence of an ample supply in the canals as well as a portion that could be spared from the Vartrey. The streets of Dublin would certainly be the better of a washing, and it would be a consummation devoutly to be wished, if the abuses in our Corporation could be washed out at the same time by such an easy process as turning on at high pressure the water of the Vartrey or the canals.

#### PROFESSOR HUXLEY ON TECHNICAL EDUCATION.

THE following is a portion of a lecture delivered on the 1st inst., by Professor Huxley, at the Society of Arts, London. The subject is one to which he has devoted particular attention:—

Compared with forty years ago, the educational system of to-day presented a very great contrast indeed. He had not a word of fault-finding as to the means of education at present existing, but he thought there were one or two directions in which it could be improved. The Science and Art Department of the Privy Council, which had charge of education, had been doing a very important work, perfectly germane to the present question. There was no reason why, in any of our great centres of industry, anyone having the capacity and energy might not employ such leisure as he possessed after his work, in acquiring such instruction as he needed by this means. There were some men born with special aptitude, and there should be some machinery by which those possessing rare qualities should be utilised for the public benefit. He should like to see something in the way of an intellectual ladder—as he had expressed himself before—by which anyone might climb to as high a position as he could reach. He should like to see a system of exhibitions created, by which a boy who had distinguished himself in the ordinary course of his school education should be able to prolong his instruction and avail himself of the facilities given by the science classes for further instruction, and he

should be inclined, in the case of young people showing exceptional capacity, to do something in the way of apprenticing them. As regarded others, who showed still greater qualities, he thought something in the nature of a college might be established, while others might be sent to the universities. Beyond this he did not think there was much to be done in the way of technical education.

Within the last few months the livery companies of London had shown a consciousness that they were the inheritors, not only of the wealth, but of the duties of the great trade guilds of the Middle Ages. They had carefully sought information how they could apply their resources in the best way for the promotion of the education of handicraftsmen; and he had authority to say that very shortly an executive committee would take all suggestions into consideration, and would do its best to bring out some satisfactory result. So that he thought they might be very contented with the prospect for the future. He entertained no chimerical notion that by any system of technical education the working or other classes could be made men of science or artists. Mr. Galton, he thought, had told them that one man in four or five thousand was a person of special talent, and that one man in a million might be called a genius. He (Professor Huxley) would endeavour to find these rare persons, and would cultivate their faculties for the public good. Let it be borne in mind that if anyone could go into the market and buy a potential Watt, Faraday, or Davy for £100,000, the bargain would be dirt cheap. In conclusion, Professor Huxley attributed the sympathy which he said men of science had with working men to the fact that they also were handicraftsmen, and as having learned by practice what was the sort of need for technical education, perhaps he might appeal to them to attach a little more weight to what he had been saying than they would if he were a mere theoretical talker.

#### LEINSTER HOUSE, AND THE PROPOSED SCIENCE AND ART MUSEUM.

WE print Lord Powerscourt's suggestions in reference to the proposed Science and Art Museum, and on the advisability of removing the historic Leinster House, to make room for the new buildings. As much as we are in favour of public improvements, we cannot subscribe to his lordship's view in respect to the demolition of Leinster House—a worthy specimen of the architect Castle's work, and a good example of the Classic architecture exhibited in Dublin public buildings early in the eighteenth century. If for historical associations alone, the old mansion of the Fitzgeralds should be preserved intact. His lordship writes:—

"An idea was suggested to me a few days ago by a gentleman connected with art in Dublin, which seems so well worth consideration that I venture to trouble you with it, in connection with the proposal of her Majesty's Government to build a Science and Art Museum for Ireland. It commends itself to me as a means of getting rid of the opposition generally entertained, in which I fully concur, to the scheme of blocking up the eastern side of Leinster Lawn, and also because the plan of the proposed long block of building, which is probably in a forward state, can, with very trifling alterations, be adapted to the site which I suggest as easily as to the one so much objected to by us, who deprecate most strongly the obstruction of the finest urban feature in Dublin.

The idea is, that the proposed long block of building, something similar in form to the great Library in Trinity College, lighted from both sides as that is, should be erected on the western side of Leinster Lawn, instead of on the eastern side, in the same place where Leinster House now stands, that house being demolished to make room for it!

There are many people, no doubt, who will have objections to such a sweeping measure as the demolition of Leinster House, but I would ask the indulgence of the public to my vandalism for the following reasons.

There are no very fine apartments in Leinster House—at any rate, at all comparable with those

which would probably be obtained for all the purposes required in the much larger and more comprehensive scheme now proposed by the Government.

If such a building were erected as is likely, and is, I believe, contemplated, extending from the site now occupied by the School of Art to the boundaries of the land now in the occupation of the Royal Dublin Society abutting on Kildare-place, the School of Art would occupy nearly its present position at the north end of the block, and the Science and Art Museum would take up the whole of the remaining length of the building, on the first or principal floor, and on the ground floor underneath would be ample space for reading-rooms, council-rooms, and such other offices as might be required, and the officers and servants could be accommodated in an attic storey over the museum.

The proposed central archway would form a handsome feature when viewed from the end of Molesworth-street, near the Librarian Hotel, and give a view through from that point into Leinster Lawn, and beyond into Merion-square. If the present gateway were removed and a handsome wrought iron railing erected along Kildare-street, the courtyard of Leinster House would be extended sideways, so as to leave the whole front of the new Museum exposed to view from Kildare-street, in the same way as the whole front of the British Museum in London is visible from the street.

The materials of Leinster House could, of course, be worked up in the new buildings, and a passage could be made connecting, as at present, the Natural History Museum, which is to be the National Library, on one side, and perhaps an entrance could, if necessary, be made on the other side, under cover, to the National Gallery.

I think that if this suggestion were adopted, and the new building were built at such an angle that the colonnades connected it with the two blocks flanking Leinster Lawn, we should have such a complete and harmonious whole that from an æsthetic point of view the result would be the most satisfactory, and the great objections to the plans as at present proposed would be entirely neutralised.

#### RAILWAYS— CLEMINSON'S IMPROVED ROLLING STOCK.

CLEMINSON's patent is certainly an improvement that is likely to prove highly advantageous, for it will effect a desirable revolution in railway rolling stock. The new system of radiating axles will enable ordinary-made vehicles of the European type to be made to any length, and to pass freely and securely round quick as well as wide curves as along a straight road. The axles of carriages and wagons, as every one knows, have heretofore been rigidly parallel, and no easement is afforded for adapting themselves to varying curves on a railway. By Cleminson's system the object sought is obtained by mounting the axles with their axle-boxes, guards, &c., in moveable frames, each pair of wheels and axle having their own frame. Each pair of wheels by the new system adapt themselves to the curve over which they pass, the axle becoming the radius of a circle of which it forms a part. It is unnecessary for us to enter into long details, as those who are interested are afforded an opportunity in this city of seeing the new appliance in operation. Mr. Corlett has had a six-wheeled car made on Cleminson's principle for the North Street Tramways, and the result has been satisfactory. Two of the old carriages on the London, Chatham, and Dover Railway have been converted into the Cleminson model, and have been running successfully for several months. The new system is applicable to several kinds of vehicles as well as to railway and tramcars, to street traffic as well as railroad traffic. The advantages of Cleminson's system is so apparent, it is likely that in a short time the more important railway companies will adopt it. Indeed it is being gradually adopted at present on several foreign railways and tramways, and some of our home lines are following suit.

A rich contractor was holding forth upon the instability of the world. "Can you account for it, sir?" he said, turning to Sam Foote. "Well, not very clearly," he responded, "unless we suppose it was built by contract!"



## THE HOME SECRETARY ON ART.

Mr. Cross distributed the prizes to the students of the London Metropolitan Drawing Classes on the 13th inst. In the course of his speech the right hon. gentleman said he could conceive nothing more conducive to the benefit of the community than the teaching of art. He believed truth in art was everything, and nothing more fatal to art than the want of truth. Truth was unfortunately ignored in the buildings around them. Why make bricks appear like stone by covering them with plaster? Why disguise iron in buildings by artificial means? Why should ladies wear buttons on their boots, and dresses merely for the sake of ornament, or why should oil painting be made to represent tiles? It was the interest of workmen and the community at large that their tastes should be elevated, and they should dismiss once and for ever that which was not true, for nothing could bring out more effectually that which was high, noble, and holy in human nature than the study of true art.

## THE GRAY MEMORIAL.

At a meeting of the Corporation on the 10th inst., the following letter was read from the Sir John Gray Memorial Committee:—

We have been requested to ask you to submit to the Town Council at its next meeting the accompanying resolution, passed at this day's meeting of the Sir John Gray Memorial Committee. We are aware that on a former occasion the council kindly voted a space at the Rotundo end of Sackville-street as a site for the proposed memorial to Sir John Gray; but further consideration of the subject, and consultation with the members of his family, have led the committee to believe that the site now asked for at Abbey-street is one every way more suited for the purpose they have in view, and this opinion was arrived at and shared in by our artist, Mr. Farrell, so long ago as the date mentioned in the enclosed resolution. The committee delayed communication on the matter with the Corporation till they saw a prospect of commencement of the erection of the monument.

The following is the resolution referred to:—

"That, in accordance with the resolution of the committee, at its meeting of February 12th, 1877, adopting the site in Sackville-street, between Lower and Middle Abbey-street, for the memorial, the honorary secretaries be requested to write to the Lord Mayor and Corporation asking a grant of the site for the monument to Sir John Gray."

On the motion of Mr. Murphy, seconded by Mr. French, the letter was referred to No. 1 Committee.

## THE BALFE MEMORIAL.

The result of the efforts made towards honouring Balfe in his native land, is not at all a matter for congratulation. From first to last the affair has been wretchedly managed; but we shall not attempt to apportion blame, as it is difficult to say who is the most blameful or blameless. At the last meeting of the committee, Mr. MacDonnell stated that after the payment of all expenses, to the amount of £63, there remained in bank £88 12s. 10d., for which he produced a certificate. Mr. MacDonnell then read two letters from Madame Balfe, who is at present residing in Villa Trias, Biarritz, expressing her warm obligations to the members of the committee and subscribers who were engaged in the movement for doing honour to the memory of her late husband, and intimating that she thought the best course now would be to carry out the original design of placing a bust to the memory of Balfe in the department of the National Gallery of Dublin, which is specially devoted to illustrious Irishmen.

The following were passed unanimously:—

Resolved—"That in deference to the views and wishes of Madame Balfe, the committee were of opinion that it was expedient, without further delay, to apply the fund now in hands to carry out the object for which the committee was first established, by placing a bust of Balfe in the National Gallery of Dublin,

his native city, in the department specially devoted to illustrious Irishmen."

Resolved—"That Messrs. T. A. Jones, Henry Doyle, and Hercules MacDonnell be requested to enter into an arrangement with an Irish sculptor of eminence (?) for the execution of this design, and to submit the arrangement they propose to a meeting of the committee to be specially summoned for the purpose."

Resolved—"That while the committee think it inexpedient to make any further appeal to the Irish public for subscriptions towards the erection of a memorial to Balfe, they cannot forbear recording their opinion that the response which has been made is unworthy of his countrymen and incommensurate with his fame. They therefore desire to afford to any persons who may still be desirous of subscribing an opportunity of doing so by stating that subscriptions can be lodged in the National Bank, College-green, to the credit of the treasurers, Messrs. MacDonnell and Gunn, up till the 1st of January, 1878."

## THE TREES IN SACKVILLE-STREET.

ANENT those forlorn specimens of plant life, "A Member of the late Botanic Committee of the Royal Dublin Society" writes:—

"Now, as the trees in Sackville-street are about to be replanted by the great liberality of Mr. Niven, of Drumcondra, it might be well to consider the cause of the failure of the present trees. I told my friend, Mr. Niven, that I believed the chief cause was the position in which they were planted outside the edge of the flags—in fact in a regular drain, as all the water and mud which runs along this drain pours down into the holes in which the trees are planted, keeping the roots in constant puddle and wet, and thus killing them. This was foreseen by many from the first. Now it is clear that they should be planted on the flagway—the trees planted along Wellington-road and the roads in the neighbourhood, as also in Leeson-park and on the Thames Embankment in London, are all planted on the pathway; and they will fail again if not so planted. The other mistake was those huge heavy iron cribs that surround the trees in Sackville-street. Some iron merchant must have had a voice in the matter, who thought there was nothing like leather—their very weight helped to kill the trees. In all the places mentioned above, where the trees have prospered so well, wooden cribs have been used."

Iron guards are generally used in the London metropolis, and their weight does not kill the trees, because, indeed, they exert no pressure upon either the stems or roots, from the manner in which they are placed. These trees are bedded in good soil; and if the Sackville-street trees were properly placed and bedded in good soil, and not nourished with street mud, they would be in a healthy state.

## THE CITY SEWERS AND THE SEWER RATE.

The sewers and sewer rate formed the subject for a discussion at a meeting held on the 7th inst. Dr. Norwood complained that although last year the passing of the estimates of the North and South City Sewers was delayed in order that the Council might be furnished with a specific statement of the new sewer works proposed to be executed during the year, yet he learned from the report now presented by the City Engineer that not a single new work of those thus specially estimated for, and for which the rates had been struck, had been executed. The only reason assigned by the Engineer in his report was the want of funds. He thought that some more satisfactory explanation than that was due from No. 1 Committee to the Council. Mr. Denchly also complained of the state of the sewers of the city. When the main sewer in Eustace-street was opened the other day it was found to be insufficient for the drainage of a cottage. He had that day heard of a gentleman in one of the best streets in the city having been struck down by typhoid fever. Their sewers required a thorough inspection, and until that was done all the public health committees were a sham, a delusion, and a snare. They had recently appointed an assistant to the engineer, but for all he had done up to the present he might as well be in the Sahara. In March last a resolution had been passed that their

officers should furnish monthly reports, but it had not been attended to.

After some discussion of the usual kind, Mr. P. Neville (City Engineer) having been requested to explain, said that the cost of works proposed to be executed in the South City in 1878 was £3,097, and of maintenance £1,500, which with 12½ per cent. for cost of collection and contingencies, would make a total of £5,170. In the North City the estimate for new works was £2,306, for maintenance £1,200, and contingencies, &c., £438—making a total of £3,944.

## TO CORRESPONDENTS.

THE PASSING YEAR.—This issue completes the nineteenth volume and year of the existence of the IRISH BUILDER. In our New Year's Day issue we will have some words to say retrospective and prospective. For the present we wish all our subscribers, readers, and friends the "Compliments of the Season."

REVIEWS.—We are obliged to hold over some notices of books, owing to continued pressure of literary matter.

"OUR DRAINS."—Some verses appeared in our last issue under this title, which were ascribed to the *Medical Press*. We wish, as a matter of justice, to state that the verses originally appeared two or three years since in our contemporary the *Builder*, and were from the pen of a gentleman who has contributed to our own pages from time to time.

CORRESPONDENCE.—We have constantly to cancel letters and other matter not suitable to our pages, or not of sufficient importance. We, however, always try to make room for really practical and useful correspondence. There is no use in correspondents sending us stale information or copies of letters which have appeared elsewhere, and are several days old.

RECEIVED.—W. S.—A Citizen (yes)—W. (London)—Artisan (perhaps early in the new year)—R. H. A. (thanks)—An Actor (ditto)—H. B. (Belfast)—H. A. (Cork)—F. B., &c.

ARTISANS' DWELLINGS ACT.—At a meeting of the Artisans' and Labourers' Dwellings Committee of the Corporation, a letter was read from the Local Government Board consenting to recommend the granting of a sum of £20,000 towards carrying the Artisans' and Labourers' Dwellings Act into effect in one of the areas with which the committee propose to deal.

NATIONAL MONUMENTS.—A correspondent, M. A. H., in expressing his satisfaction at seeing that the ancient church of Ratass is included among others put under the care of the Board of Works, regrets to see, at the same time, that a peculiarly national one has been omitted. He alludes to the large and curious stone fort or cairn near the town of Tralee. It crowns the summit of one of the mountains of the well-known Slieb Mis.

ELECTRIC LIGHT IN GUINNESS'S BREWERY.—On the 7th inst., the practical use of electricity for permanent illuminating purposes was tested in James's Gate Brewery, in the presence of Mr. C. R. C. Tichborne, Board of Trade Gas Inspector, Mr. R. J. Moss, R.D.S., Mr. Robinson, and others. The vast increase of Messrs. Guinness's business and consequent necessary extension of premises, had made the rebuilding of a large portion of the brewery a work of necessity, and it is during this rebuilding that the electric light is to be used, so as to enable the work to be carried on without interruption from want of daylight. The apparatus used is "Siemen's patent dynamo-electric light," two of which will be in operation, and it is stated that each will emit a light equal to that of 1,500 sperm candles. This is the apparatus of which Professor Tyndall wrote so highly in his report to the Trinity Board, as compared with similar machines by other makers, for use in lighthouses.

KINGSTOWN DOINGS.—The important subject of contracting another township loan of £4,000 for asphalt purposes formed the chief business at a late meeting. A resolution was put that the money be borrowed and asphalt laid down in the various wards according to their valuation and in places chosen by a committee. An amendment was moved to spread the asphalt by mileage throughout the township generally. On a division the amendment was lost by one vote. Mr. Sullivan moved a second amendment to adjourn the question *sine die*. He said it was disgraceful loading the township in this way with debt and on falling-in leases of from twenty to thirty years. If this new loan were contracted the amount borrowed in this way would actually amount to £61,000, and as other large loans for sewerage were in contemplation the final amount saddled on the township would for forty years probably amount to £100,000. Mr. Foley thought that, as a large amount of asphalt had been recently laid down in Kingstown, some time should be given to test its quality and durability. Mr. O'Brien fully agreed in the view that this board, a new one in many respects, had no right to burden the ratepayers with such a large outlay. The Clerk said that, under any circumstances, the matter should go before the full board at the next monthly meeting for ratification.



### NEW ORGAN, ST. PAUL'S CHURCH, CORK.

ON Sunday, 2nd instant, the new organ, built for this church by Messrs. Telford and Telford, of Dublin, was opened in presence of a large congregation. The improvements made of late in the church itself are very considerable, and its internal appearance is now, perhaps, as effective as it would be possible to make a building of its class. The new instrument adds considerably to its effectiveness; its handsome Grecian case of pitch pine and artistically-decorated front pipes blending well with the prevailing colours of the walls and illuminated revedos.

Dr. Marks, organist of St. Fin Barr's Cathedral, presided at the instrument at both morning and evening services, displaying in a masterly manner the many and varied qualities of its tones. In the use of the "viol d'amour" and "voix celestes" the distant and charming delicacy of tone, contrasted with the fluty "Lieblich gedacht" and "Lieblich flute," was very pretty, the "gamba," "oboe," and "harmonic flutes" forming a charming variety to the full, rich, round tone of the diapasons and the bourdon of the pedal organ—the latter in depth and quality surpassing many 16 ft. open diapasons.

The builders of this organ have proved themselves most capable artists, in design, decoration of the case, voicing of the pipes, and workmanship of the complicated mechanism. We understand the entire instrument was constructed at their factory in St. Stephen's-green, and we congratulate the rector and his congregation in having procured so satisfactory an instrument of Irish manufacture, and trust our clergy and vestries will only take the trouble to inquire into the capabilities of native work before sending their orders out of this country.

The following is a specification of the organ:—*Great Organ*.—CC to G—56 notes. 1, open diapason; 2, salicional; 3, gamba (grooved to No. 2); 4, Lieblich gedacht; 5, flute harmonic; 6, fifteenth. *Swell Organ*.—CC to G—56 notes. 7, open diapason; 8, viol d'amour; 9, voix celeste; 10, rohr flöte; 11, flautina; 12, bassoon and oboe. *Pedal Organ*.—CCC to F—30 notes. 13, bourdon. *Couplers, &c.*—14, swell to great, unison; 15, swell to great, sub-octave; 16, swell to great, super-octave; 17, swell to pedals; 18, great to pedals.

### JAPAN NOTES.

A CLERGYMAN writing from Kioto, Japan, on the 12th September, says:—"There is no glass in the room where I write, but one side of it (the longer) is perfectly open, admitting both air and light, under a deep fringe of bamboo thread that hangs down for 18 in. There is a small open court beyond it, and then another room, while the bedrooms open off a narrow wooden side-walk, protected from the weather by projecting eaves. Paper partitions divide the rooms, which are laid with soft straw mats, 3 in. thick, and beautifully clean; and paper screens, that slide past each other, serve as doors. The house was formerly a residence for priests, and is on one side of the gate to a Shinto temple, a lofty but doorless gateway of reddish wood. These temples abound, and the government does not scruple to appropriate them to hotels, barracks, hospitals, and other secular uses. Under the bamboo fringe I see over the low roof next me a steep mountain wooded to the summit; and out of the dense and lovely foliage peep fragments of pagodas and the quaint carved roofs of shrines. It is dusk, and the music strikes up in a tea-house across the narrow street, a monotonous twang of strings and beating of drums, likely to continue for hours. . . . There are twenty or thirty newspapers in the capital alone, some of them daily, with a circulation of perhaps 20,000 for the best; and in the morning train the Japanese reads his paper like an Englishman. They have primary schools and higher schools, normal schools

and special schools, and schools for girls; a college of engineering, probably the best conducted and most successful institution in the empire; and a university with excellent teachers, but of which little more than the foundations have been laid. Their soldiers and sailors are armed and drilled in European fashion. Their streets are as well patrolled by police as our own; and crimes of robbery and violence are far less frequent than with us. Many of them drink a native whiskey, which is called *Taki*, but the really hard drinkers are foreigners; and for every public house in one of our towns you might substitute a fruit shop in Japan. They are not a rich people, but they seem to have abundance to eat; and I never noticed starved limbs, nor saw more than half a dozen beggars, and they were religious mendicants. A man can live well, after their fashion, on twopence-halfpenny per day; and their land is fertile, covered between the mountains with endless fields of rice. Their fields are well kept, and their roads are good for the small vehicles they use; they are not without desperate ruts, and are sometimes in ill repair, but I have ridden for miles along one as broad and smooth as if it had led from one of our own suburbs. They excel in some arts, and make the daintiest teacups and the hugest bronzes. We saw one bronze statue of Buddha, 54 ft. high: a man can stand upright in the nostrils, and the ears are more than 9 ft. long. Tokio is the residence of the Emperor and the Court. There, as elsewhere, foreigners are confined to one spot called the "Concession." There, as well as elsewhere, some of the missionaries have secured a residence outside and in the native town, the Government recognising them as teachers; but the houses in which they teach, have service, and live, must be held in the name of a Japanese, a somewhat precarious tenure.

### ENIGMA.\*

I'm centred in that glorious sphere

To which our earth must trace

Its days, its seasons, and its year,

Long as it revolves in space.

Although of mundane growth, I'm proud

To tell of things ethereal, in the azurs blue.

Of heaven, in the thunder, and the cloud

I'm denizen,—all this you'll find quite true.

I'm seen in summer's sunset hour,

When bathed in tints of molten gold,

Throned in gorgeous, glorious power—

Thus my name I try 'unfolds.

I dwell in the hut with the lowly poor,

And exist in the house of their betters;

I've a home in the mountain which shadows the moor,

But kept at work by my friends, men of letters.

Like all my race, I'm known to range

O'er the wide world, through every nation,

In tourist garb. Then 'tis not so strange

How soon you'll tell what's my vocation.

When'er you hear of a useful measure,

You'll see me first, I very well know.

After all, 'tis not for pleasure;

It's *must* with me—as a rule 'tis so.

I'm sure you'll think it rather droll

When you discover I'm always by;

Go where you will, where'er you stroll,

No matter where, there so am I.

Oft with me a neighbour near,

'Tis odd enough, I trow,

When together we appear,

What meant *yes* we change to *no*.

In many a fairy park-like scene

Exists a name synonymous with mine:

A tree it is that's beautifully green—

The emblem of longevity, in fine.

And now that I've essayed to tell

My tale and all my history,

Who am I? 'Tis clear you know full well,

And find therein's no mystery.

### HOME AND FOREIGN NOTES.

Amongst the engravings in the *Art Journal* for the present month is one of the late J. H. Foley, R.A. It is by Mr. G. Stodart, and is taken from a bust by Brock, a former pupil of our native sculptor.

\* Written for the IRISH BUILDER.

The directors of the Manchester Mechanics' Institution have resolved to establish a class for practical instruction in carpentry, and with that view they have obtained estimates for the supply of benches, lathes, and other appliances necessary for a model workshop. One of the rooms will be fitted up, and by the new year the first carpenters' and pattern-makers' workshop of the kind will be opened in Manchester.

### BALLYMONEY AND BALLYCASTLE RAILWAY.

—It is proposed to make this line upon the narrow-gauge system, the track being 3 ft. wide. The length of the line as laid out will be about sixteen miles, and as it is proposed to connect it with the Belfast and Northern Counties Railway at the present station at Ballymoney, and to accommodate the towns and villages of Dervock, Stranocum, Mosside, Arnoy, &c., and to terminate in the first instance at Ballycastle, the company taking powers hereafter for an extension to the iron and coal mines in the neighbourhood, the quantity of the latter mineral unwrought being estimated at 18,000,000 tons. The estimated cost of the railway, including lands, parliamentary and law expenses, is £4,500 per mile, with £5,000 per mile for rolling stock in addition, being something like half the outlay for a railway laid down upon the broad-gauge system. The line, besides developing the rich agricultural and mining parts of the north-east of the County Antrim, will also render the magnificent scenery of Fair Head, Kenbane, Carrick-a-Rede, and the bathing at Ballycastle available to the traveller, the tourist, and the seeker after health. The promoters propose to raise at least £50,000 of share capital by public subscription, including the amount to be given by the Belfast and Northern Counties Railway Company, whose directors are favourable to the undertaking; and who will, it is stated in the prospectus of the company, recommend their shareholders to subscribe to the capital required to make the railway.

A CRETAN VILLAGE.—A Cretan village is a strange-looking place. All the dwellings are alike in ugliness, oblong in form, with walls of rough stone, and flat roofs destitute of parapets and chimneys. One or two arches are thrown across the length of the cottages to support the roof, which consists of tenacious clay a few inches deep, laid on pieces of bark, and rolled flat—let antiquaries shudder—with the drums of marble columns. In Askpyho the heavy snowstorms which occur there make it unsafe to carry up the buildings higher than one storey, and they certainly have a most miserable exterior. But the comfort within doors depends at Askpyho, as everywhere else, not on the architect, but on the lady of the house, and the wives of Sphakia rank high amongst their sex. They are conspicuous for beauty. Their dark eyes are large and lustrous, their features are delicately chiselled, and waving tresses fall in profusion from beneath their modest kerchiefs. Their carriage is graceful as the doe's. But, though possessed of uncommon personal charms, their attention is by no means confined to the toilet. Everything which their homes contain is the work of their own hands. The cloth of the husband's jacket and fez of the wool of the sheep he tends is dyed, spun, and woven by the hands of his faithful wife. She it is who makes his garments from the cotton plant which grows before the door; the bright scarf that binds his waist is from the silkworm which feeds upon his mulberry trees; the mats and tapestries whose bright designs, taken from the pattern-book of tradition alone, give his home a cheerful air, are the work of her industrious loom, and many more objects which I am incompetent to enumerate are due to her untiring labours. It was these same Sphakian women who only ten years ago were, with their helpless children, hunted from mountain to mountain, outraged, and murdered. In the cottage of my guide, though the owner was by no means a chief among his people, the tablecloth, the napkins, the sheets, all of them home-made, were bordered with Cretan lace; the pillow-case was a single piece of the same rich material; the counterpane was so gorgeous with many colors that I did not refrain from expressing my admiration of it. "Yes," said my host, "my wife is of a very good family, and knows the old-fashioned ways of weaving which her mother taught her." Yet the cottage itself was a miserable affair; it consisted of a moderate-sized room, with a gallery for sleeping in, and two very small ones, of which the larger was the kitchen. The walls were not even whitewashed, and the floor was of mud; yet the spirit that reigned there reconciled one to all. I dined with great zest off English plates, which are prized there as much as Japanese crockery is in England; but without wine, not a drop of which was to be found in any of the seven villages—a significant fact. The wife waited on us, for conjugal respect is strictly enforced, while even suspected infidelity is punished with death.

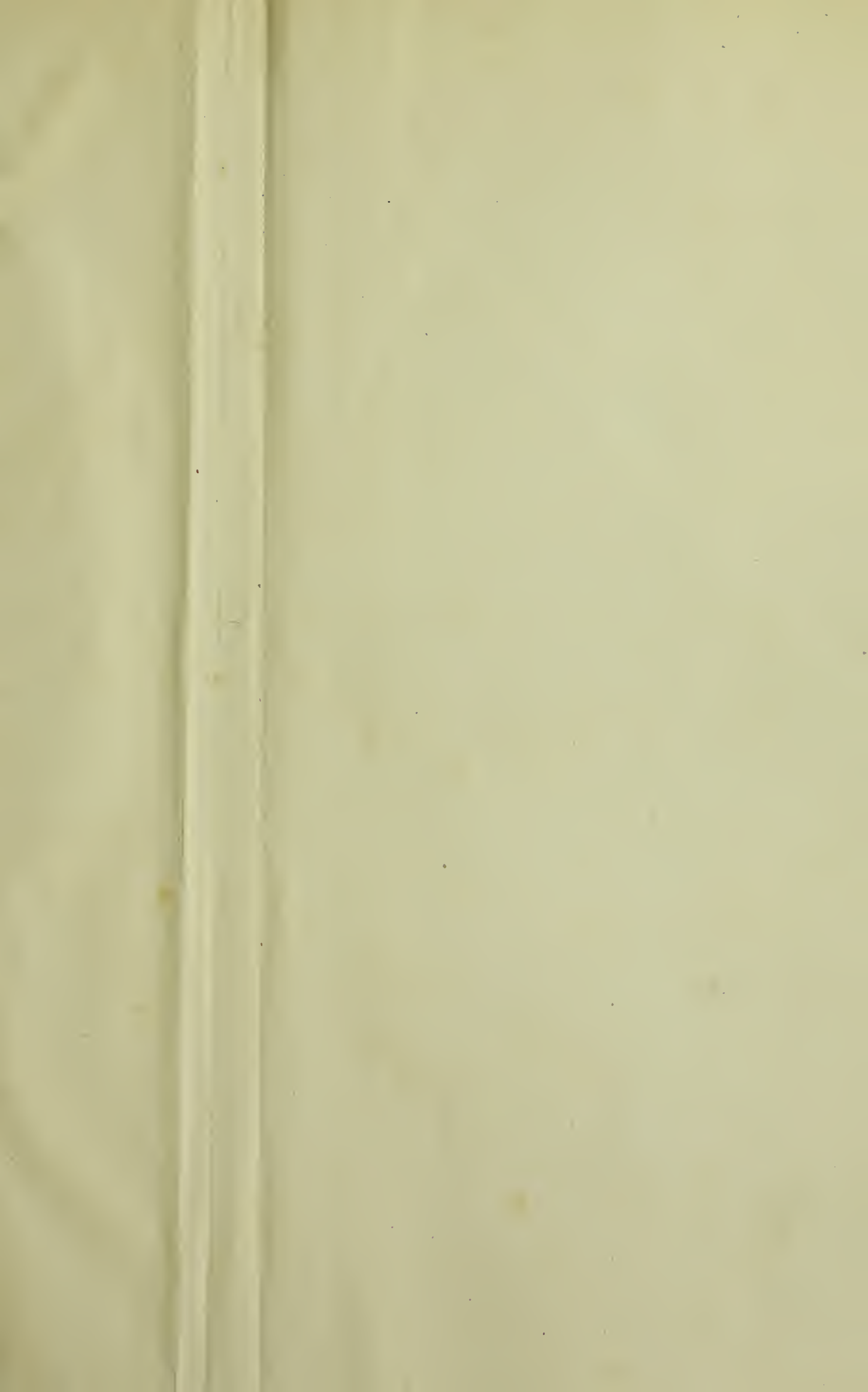
























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